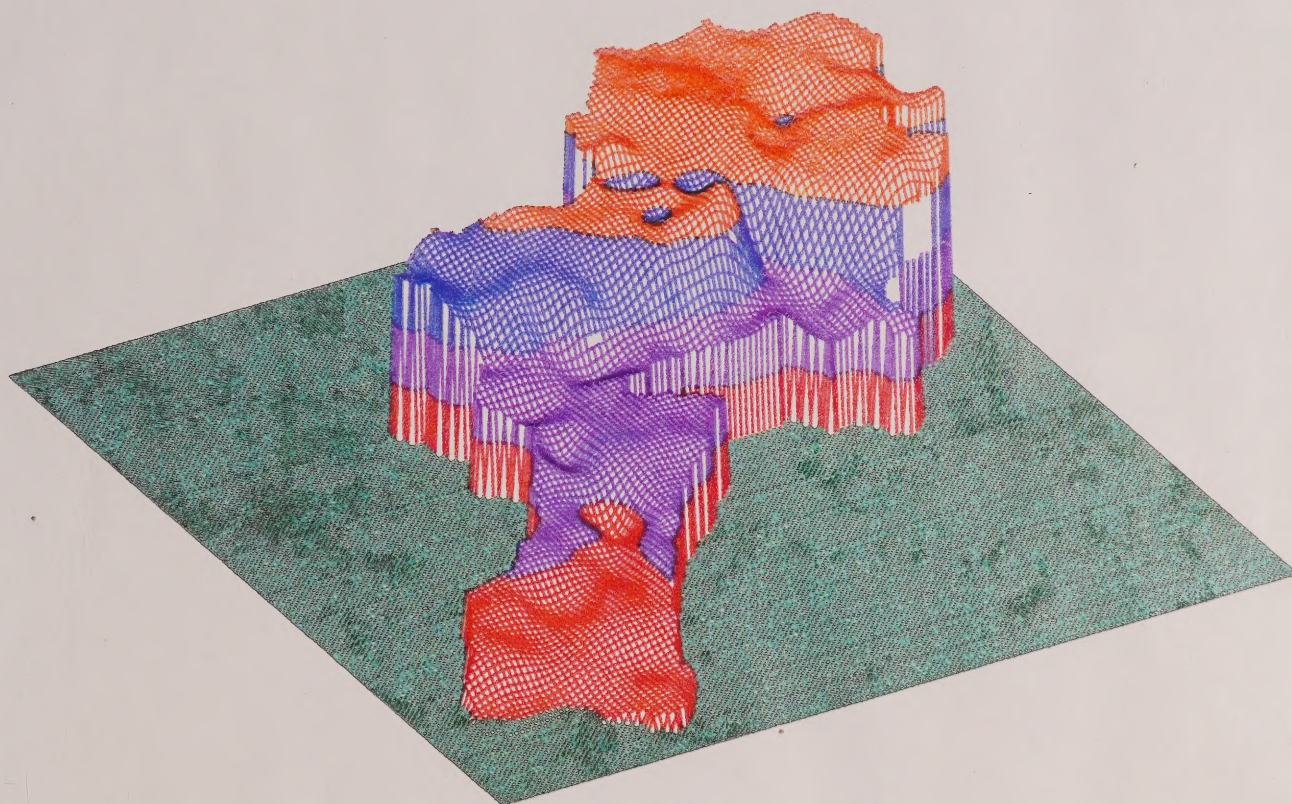




3 1761 11890996 9

GROUNDWATER RESOURCES OF THE CREDIT RIVER WATERSHED (APPENDICES)




MINISTRY OF ENVIRONMENT AND ENERGY
Environmental Monitoring And Reporting Branch



Presented to the
LIBRARY *of the*
UNIVERSITY OF TORONTO

by

CREDIT VALLEY
CONSERVATION AUTHORITY



Digitized by the Internet Archive
in 2024 with funding from
University of Toronto

<https://archive.org/details/31761118909969>

1967-1968
1969-1970

1971-1972

1973-1974

1975-1976

1977-1978

1979-1980

1981-1982

1983-1984

1985-1986

1987-1988

1989-1990

**Table 1. METEOROLOGICAL STATIONS IN AND AROUND
THE CREDIT RIVER WATERSHED.**

<u>Station Name</u>	<u>Period Of Record</u>
Albion Field Centre	1969–1992
Brampton MOE	1969–1992
Heart Lake	1961–1989
Georgetown WWTP	1963–1992
Lakeview MOE	1963–1992
Oakville Southeast WPCP	1971–1992
Orangeville MOE	1961–1992
Toronto Pearson International Airport	1961–1992



Date
Expiry Date

Date

Exp

Exp

Exp

Approved

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

new (C)

Table 2. STATISTICAL SUMMARY OF EXTREME VALUES MEASURED AT VARIOUS METEOROLOGICAL STATIONS IN AND AROUND THE CREDIT RIVER WATERSHED.

Station: Brampton MOE

Location: 43° 30' N 79° 57' W/O
Elevation: 244m
Period Of Record: 1966 – 1987

Daily Maximum (°C)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Daily Minimum (°C)	N	N	N	N	19.0	N	N	N	20.6	N	N	N
Extreme Maximum(°C)	N	N	N	N	7.5	N	N	N	10.4	N	N	N
Date	14.0	12.8	25.0	31.5	33.0	36.5	37.5	36.1	33.3	29.4	22.0	18.5
Extreme Minimum (°C)	988/31	976/25	986/30	990/25	987/30+	988/25	988/09+	975/01	962/13	971/02	990/03+	982/03
Date	-30.0	-27.0	-21.0	-12.2	-6.7	0.0	4.4	2.0	-3.9	-7.2	-13.0	-27.5
Extreme Daily Rainfall (mm)	976/23		989/07	965/18	971.04	964.05	968/30	982/29	965/27	969/23+	989/29+	980/25
Date	20.3	30.0	29.7	29.2	41.7	35.0	104.1	76.0	74.4	40.6	43.4	35.0
Extreme Daily Snowfall (cm)	964/24	990/22	977/12	980/14	969/18	982/28	969/24	986/26	986/10	965/21	968/28	979/25
Date	17.8	30.5	30.5	18.0	1.3	0.0	0.0	0.0	0.0	8.9	10.2	30.5
Extreme Daily Precipitation (mm)	977/09	965/25	968/12	978/06	976/06	990/30+	990/31	990/31+	990/30+	969/21	977/27	968/27
Date	25.0	31.0	30.5	29.2	41.7	35.0	104.1	76.0	74.4	40.6	43.4	35.0
	979/24	890/22	968/12	980/14	969/18	982/28	969/24	986/26	986/10	985/21	968/28	979/25

Station: Georgetown WWTP

Location: 43° 38' N 79° 53' W/O
Elevation: 221m
Period Of Record: 1962 – 1990

Extreme Daily rainfall (mm)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Date	26.90	36.1	33.0	35.6	59.7	85.8	93.0	110.5	70.2	44.5	58.4	40.8
Extreme Daily Snowfall (cm)	970/28	968/01	974/04	975/18	974/16	982/28	969/28	969/16	986/10	972/22	962/09	979/24
Date	40.60	27.0	20.3	23.6	8.0	0.0	0.0	0.0	0.0	11.2	14.0	21.3
Extreme Daily Precipitation (mm)	966/22	988/11	968/12	976/25	983/14	990/30+	990/31+	990/31+	990/30+	969/21	986/20	973/20
Date	40.60	39.5	33.0	35.6	59.7	85.8	93.0	110.5	70.2	44.5	58.4	43.2
	966/22	985/12	974/04	975/18	974/16	982/28	969/28	969/16	986/10	972/22	962/09	972/12

2000 10-1
1200
3.34116,02
[revised]

0700

1000

Table 2 (Cont'd)

Station: Heart Lake

Location: 43° 44'N 79° 47'W/O
 Elevation: 259m
 Period Of Record: 1957 – 1989

Date	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept.	Oct	Nov	Dec
Extreme Daily Rainfall (mm)	36.3	34.3	43.2	33.0	59.7	57.0	63.5	78.0	83.0	49.0	55.9	33.0
Date	960/12	965/09	974/04	975/18	974/16	982/05	969/24	986/26	986/10	965/21	974/20	972/12
Extreme Daily Snowfall (cm)	38.1	30.2	23.4	24.0	11.4	0.0	0.0	0.0	0.0	14.7	18.6	30.5
Date	966/22	960/25	968/12	979/07	966/12	989/30 +	989/31 +	989/31 +	989/30 +	969/21	986/20	968/27
Extreme Daily Precipitation (mm)	41.9	34.3	43.2	33.0	59.7	57.0	63.5	78.0	83.0	49.0	55.9	45.7
Date	968/14	965/09	974/04	975/18	974/16	982/05	969/24	986/26	986/10	965/21	974/20	972/12

Station: Lakeview MOE

Location: 43° 34'N 79° 34'W/O
 Elevation: 78m
 Period Of Record: 1963 – 1980

Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Daily Maximum (°C)	-0.9	-0.1	4.3	10.7	16.7	22.4	25.7	24.5	20.5	13.8	8.2	2.3
Daily Minimum (°C)	-8.9	-8.2	-3.8	1.8	7.0	12.2	15.6	15.2	11.4	5.3	1.2	-5.2
Daily Mean (°C)	-4.8	-4.1	0.3	6.3	11.9	17.3	20.6	19.9	16.1	9.5	4.7	-1.3
Extreme Maximum (°C)	14.4	14.0	24.0	31.0	33.3	36.0	37.0	36.1	34.0	30.6	22.8	20.0
Date	967/23	984/23	986/30	990/26	969/29	988/21	988/07	973/28	983/10	963/07	974/01	982/03
Extreme Minimum (°C)	-31.7	-31.0	-25.0	-12.8	-7.8	1.1	5.6	-0.6	-3.0	-8.3	-11.5	-25.0
Date	976/23	987/15	980/02	972/07	977/04	975/03	971/03	976/30	989/28	972/31	987/21	982/13

Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Extreme Daily Rainfall (mm)	28.7	47.0	33.8	40.6	62.2	97.8	59.7	61.0	69.0	43.7	46.0	40.0
Date	974/20	966/10	977/12	977/22	974/16	967/10	977/06	975/23	986/10	969/19	977/07	979/24
Extreme Daily Snowfall (cm)	30.5	21.0	20.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	12.7	22.9
Date	968/14	982/03	983/21	979/08	990.31 +	990/30 +	990.31 +	990/31	990/30	990/31 +	971/29	973/19
Extreme Daily Precipitation (mm)	55.9	47.0	33.8	40.6	62.2	97.8	59.7	61.0	69.0	43.7	46.0	40.0
Date	968/14	966/10	977/12	977/22	974/16	967/10	977/06	975/23	986/10	969/19	977/07	979/24
Days With Maximum Temperature > 0 °C	14	14	24	29	31	30	31	31	30	31	29	22

Table 2 (Cont'd)

Station: Oakville Southeast WPCP

Location: 43° 29' N 79° 36' W/O

Elevation: 87m

Period Of Record: 1970 – 1990

Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Extreme Daily Rainfall (mm)	30.2	50.4	39.9	45.2	55.9	37.0	50.0	67.0	97.8	39.8	41.7	41.4
Date	974/20	990/22	972/01	977/22	974/16	982/05	987/19+	982/24	976/17	973/29	977/07	972/12
Extreme Daily Snowfall (cm)	18.3	20.0	15.0	10.0	0.0	0.0	0.00	0.0	0.0	0.0	12.0	15.2
Date	976/23	984/28	985/04	979/08	980/31+	990/30+	990/31+	990/31+	990/30+	990/31+	986/20	975/20
Extreme Daily Precipitation (mm)	30.2	50.4	39.9	45.2	55.9	37.0	50.0	67.0	97.8	39.8	41.7	41.4
Date	974/20	990/22	972/01	977/22	974/16	982/05	987/19+	982/24	976/17	973/29	977/07	972/12

Station: Orangeville MOE

Location: 43° 55' N 80° 05' W/O

Elevation: 411m

Period Of Record: 1961 – 1990

Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Daily Maximum (°C)	-4.3	-3.6	1.9	10.1	17.5	22.30	25.1	23.8	19.3	12.7	5.2	-1.6
Daily Minimum (°C)	-12.4	-12.4	-7.2	-0.5	5.3	10.0	12.7	12.0	8.5	3.0	-1.6	-8.6
Daily Mean (°C)	-8.3	-7.9	-2.6	4.8	11.5	16.2	18.9	17.9	13.9	7.9	1.9	-5.0
Extreme Maximum (°C)	11.1	12.0	22.0	28.5	31.1	33.0	35.0	35.5	32.2	28.3	22.8	18.0
Date	965/08	984/23	990/15+	990/28	982/19+	988/25	988/09+	988/03	973/03	971/02	981/03	982/03
Extreme Minimum (°C)	-35.6	-36.5	-34.4	-20.0	-6.1	-2.2	0.6	-1.1	-5.8	-10.60	-18.0	-33.0
Date	977/18	979/18	962/02	972/07	968/07+	966/01+	968/30	965/30	965/27	976/27	989/29	980/25

Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Extreme Daily Rainfall (mm)	31.8	33.0	39.1	36.2	37.6	59.7	59.7	83.8	59.8	43.7	54.6	31.2
Date	974/20	965/09	972/01	987/04	968/14	967/21	964/12	968/22	986/10	972/22	982/09	972/12
Extreme Daily Snowfall (Cm)	25.4	27.0	16.0	20.0	15.5	0.0	0.0	0.0	0.0	18.0	13.0	24.0
Date	966/22	986/07	987/30	979/06	966/12	990/30+	990/31+	968/22	990/30+	981/22	986/20	983/06
Extreme Daily Precipitation (mm)	35.3	39.6	41.7	36.2	37.6	59.7	59.7	83.8	59.8	43.7	54.6	37.3
Date	974/20	976/21	972/01	987/04	968/14	967/21	964/12	990/31+	986/10	972/22	982/09	972/12

N = No data.

**Table 3. MONTHLY, ANNUAL AND 15-YEAR MEAN PRECIPITATION AS MEASURED AT VARIOUS METEOROLOGICAL STATIONS IN AND AROUND THE CREDIT RIVER WATERSHED
FOR THE PERIOD 1975 - 1989**
(ALL VALUES IN mm)

Station	year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total
Abbotsfield Centre														
1975	51.60	79.60	80.80	57.10	38.70	44.90	65.10	88.40	64.60	87.70	32.60	39.30	87.70	731.40
1976	59.70	63.64	99.30	55.00	63.30	59.00	141.20	32.80	87.70	50.10	50.10	15.10	24.20	751.14
1977	51.10	22.80	98.00	24.80	13.80	77.30	51.60	118.50	123.00	90.30	90.30	73.20	57.90	802.10
1978	58.90	6.00	68.50	64.40	63.90	35.40	12.70	120.90	103.80	43.50	43.50	56.70	43.00	677.70
1979	63.13	18.50	59.54	81.60	79.20	26.20	27.40	68.70	47.60	120.10	105.90	105.90	72.80	771.67
1980	41.50	13.20	69.00	120.70	32.30	87.50	182.30	89.30	53.50	79.80	61.70	41.70	48.80	837.40
1981	20.00	110.80	28.50	35.70	59.20	78.80	177.30	90.00	81.30	96.80	72.20	72.20	44.90	895.50
1982	48.20	20.80	68.30	45.90	55.60	158.40	50.20	97.70	86.10	31.10	86.10	86.10	104.60	853.00
1983	44.10	28.50	73.60	82.30	155.80	29.00	57.00	50.40	44.70	85.80	40.40	91.20	89.90	832.30
1984	38.00	83.50	63.10	92.80	88.60	45.10	68.40	67.60	72.50	40.00	40.00	75.60	86.70	821.90
1985	87.30	91.60	79.42	65.00	76.70	32.10	94.40	115.70	69.90	64.40	112.50	112.50	40.20	929.22
1986	29.10	41.40	59.30	48.60	85.60	92.30	90.30	155.70	191.40	53.80	40.40	65.60	65.60	953.5
1987	57.80	24.40	57.60	51.70	25.00	72.40	119.70	76.80	85.90	66.30	63.20	63.20	60.60	761.40
1988	47.50	64.90	36.30	58.40	40.30	46.70	46.40	47.20	81.80	77.30	85.60	85.60	63.90	697.30
1989	55.80	33.60	37.20	41.40	108.60	102.40	23.40	100.30	37.80	85.00	123.70	41.60	41.60	790.80
Means	50.25	48.88	65.23	61.76	65.76	65.83	80.49	86.80	82.11	67.78	72.16	72.16	62.03	807.08
Brampton MOE														
1975	60.35	85.30	73.16	65.31	40.20	56.70	41.60	101.50	64.80	59.90	59.90	49.20	76.90	774.92
1976	55.50	54.40	81.00	65.90	94.70	87.20	107.84	53.20	65.80	57.30	57.30	22.87	42.74	788.25
1977	50.80	38.10	89.40	69.90	24.00	84.10	120.30	92.10	173.80	76.20	97.10	97.10	97.10	1012.96
1978	82.40	10.10	27.20	46.60	63.30	38.45	28.70	59.40	148.20	52.20	62.90	62.90	58.41	677.86
1979	64.50	26.40	42.20	93.80	91.60	58.07	24.00	79.09	48.20	78.60	89.10	89.10	112.60	808.16
1980	30.10	13.20	78.60	106.30	43.20	99.00	137.28	36.40	47.30	81.50	30.30	30.30	41.80	744.98
1981	16.18	74.60	24.69	50.04	40.70	57.10	58.00	115.26	73.40	126.20	126.20	51.00	28.90	716.07
1982	50.00	23.00	52.30	52.50	46.60	146.75	40.00	109.51	148.80	50.60	122.50	122.50	86.30	929.86
1983	36.88	40.87	63.80	86.20	124.10	31.70	45.80	108.60	72.90	74.60	75.20	75.20	81.90	842.55
1984	35.93	70.29	63.13	58.52	94.60	53.90	65.47	73.17	84.75	32.53	73.97	73.97	73.21	788.45
1985	44.00	36.00	38.10	10.30	71.80	44.80	59.80	150.02	61.60	64.40	165.80	165.80	33.40	780.02
1986	25.50	27.00	19.50	57.10	75.90	75.60	92.00	153.70	246.20	53.90	44.70	53.90	53.90	929.40
1987	50.80	11.60	35.80	52.00	32.20	75.80	106.80	60.40	108.40	53.90	81.60	81.60	53.40	722.70
1988	37.70	47.00	36.80	62.00	41.90	29.50	79.10	47.50	79.80	64.30	72.20	72.20	36.60	634.20
1989	45.20	22.80	33.80	45.20	85.70	125.60	20.80	73.60	46.00	80.50	97.30	97.30	30.20	706.50
Means	45.72	39.30	50.62	61.31	64.70	70.82	68.49	87.56	88.06	67.11	75.72	75.72	60.79	789.66
Heart Lake														
1975	57.20	64.10	74.60	67.10	53.90	50.10	44.50	112.50	46.90	53.40	53.40	55.90	81.40	781.60
1976	66.95	65.50	117.20	76.70	81.70	98.90	105.80	114.70	99.10	72.30	72.30	14.00	45.30	968.15
1977	71.90	31.40	98.60	66.60	22.00	105.00	76.20	118.00	137.20	100.30	100.30	109.70	105.60	1042.50
1978	104.60	14.00	49.10	68.80	73.70	43.20	26.80	65.90	172.80	67.30	67.30	54.10	57.50	797.80
1979	70.30	30.80	52.60	57.20	88.38	56.07	9.80	74.80	60.60	90.60	90.60	88.60	94.40	774.15
1980	38.83	15.85	68.80	93.40	50.09	92.10	123.55	42.00	50.80	73.40	73.40	35.80	42.60	727.22
1981	13.00	50.00	15.90	37.10	36.50	57.80	125.20	126.40	95.53	89.20	89.20	55.88	22.40	724.91
1982	67.32	15.40	38.20	32.60	53.95	177.80	50.93	109.51	100.00	41.20	107.48	107.48	78.20	872.59
1983	31.00	45.60	63.20	86.20	89.40	28.50	48.20	77.40	38.00	88.90	88.90	86.39	76.80	759.59
1984	33.80	67.40	60.60	31.60	78.40	41.60	55.40	114.80	77.90	37.30	37.30	80.40	73.96	753.16
1985	43.80	49.60	74.60	48.40	76.90	43.37	64.60	121.60	72.87	64.40	140.90	140.90	30.20	921.94
1986	21.80	37.60	38.40	54.40	78.20	89.40	89.20	144.40	231.60	54.40	53.00	53.00	68.95	961.35
1987	58.20	9.60	30.40	53.60	30.60	66.00	105.20	57.10	91.00	57.40	57.40	81.70	39.40	680.20
1988	27.60	70.20	27.00	55.00	44.40	28.40	64.50	35.80	98.50	73.70	73.70	75.10	32.30	632.30
1989	33.40	14.80	32.60	44.80	98.00	99.20	9.90	62.50	37.60	74.70	74.70	81.20	39.71	628.41
Means	49.31	40.12	56.12	58.23	64.39	71.83	66.65	97.89	94.03	69.24	69.24	74.68	59.23	801.72

Table 3 (cont'd)

Station	year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total
Georgetown WWTP	1975	76.90	94.60	95.50	60.90	64.40	65.60	39.70	135.60	47.60	51.10	51.40	103.50	886.80
	1976	73.70	65.30	105.80	83.80	87.70	82.10	83.00	70.40	91.80	63.60	17.00	53.80	878.00
	1977	56.20	47.10	94.50	84.30	19.30	72.20	115.90	108.90	144.90	68.80	83.80	97.16	994.06
	1978	79.75	12.78	45.51	59.98	72.64	38.45	43.30	80.00	155.90	51.20	67.70	57.10	764.29
	1979	53.30	29.90	60.00	106.90	88.38	68.20	66.80	100.40	51.60	81.90	100.80	104.10	892.28
	1980	34.90	19.20	74.10	55.59	57.40	109.80	133.30	77.70	54.80	77.70	19.00	58.50	771.99
	1981	19.00	81.20	26.20	55.80	65.30	74.80	131.60	126.80	119.80	118.10	58.20	40.60	917.40
	1982	79.40	45.60	85.30	59.30	44.80	195.40	53.80	94.90	124.30	46.60	124.40	99.80	1048.60
	1983	42.50	54.00	61.00	95.20	120.80	44.20	29.40	96.50	58.10	95.90	95.10	91.40	884.10
	1984	31.80	85.80	81.10	71.60	104.80	52.00	81.10	93.20	87.70	28.80	64.60	76.40	856.90
	1985	53.90	133.30	99.40	49.40	65.20	59.90	71.80	161.30	95.80	68.80	172.50	50.10	1081.40
	1986	25.80	46.90	60.80	82.00	86.00	78.90	91.30	140.20	261.80	70.20	58.10	75.80	1077.80
	1987	63.20	22.00	52.00	59.20	21.90	67.60	100.40	72.00	115.20	57.60	101.40	57.90	790.40
	1988	28.20	89.20	29.00	60.00	45.80	30.20	101.70	54.50	108.60	84.60	89.00	59.00	779.80
	1989	36.20	34.80	34.30	46.80	95.70	140.20	23.80	32.00	35.20	82.00	106.20	57.40	724.60
	Means	50.32	57.45	66.97	68.12	69.34	76.24	77.13	96.29	103.54	69.73	80.61	72.17	889.89

Lakeview MOE

1975	60.35	85.30	73.16	65.31	60.30	64.00	31.20	110.40	68.70	49.70	40.70	76.10	785.22
1976	52.60	54.30	95.20	67.20	89.20	98.80	74.30	31.00	89.20	63.60	22.87	29.90	768.17
1977	60.30	34.60	94.10	99.30	8.10	112.50	92.70	94.00	139.60	55.70	87.10	95.40	973.40
1978	61.00	10.70	45.90	67.10	60.20	38.45	42.60	47.70	125.90	45.70	47.20	38.50	628.95
1979	53.50	15.10	46.90	78.80	78.10	40.80	41.90	49.50	41.30	90.80	75.00	107.70	719.40
1980	29.10	10.50	77.80	108.40	53.60	90.30	128.40	66.70	41.40	68.50	39.10	46.70	760.50
1981	18.00	81.30	9.80	56.30	76.60	49.10	53.80	125.90	102.10	112.90	51.30	42.80	779.70
1982	86.00	62.10	57.00	49.20	70.10	132.90	37.10	127.60	133.10	53.20	111.50	92.00	1001.80
1983	38.90	27.80	94.50	60.30	120.50	33.20	29.10	85.90	37.90	67.00	85.50	94.70	805.30
1984	37.00	83.90	45.20	39.10	111.60	60.40	62.10	57.80	75.30	23.30	79.40	64.70	739.80
1985	48.00	58.90	81.70	45.80	62.60	42.80	61.40	139.60	72.87	66.70	188.90	48.85	918.12
1986	28.40	32.10	46.60	62.60	81.60	91.20	102.00	141.40	243.90	64.20	64.80	95.80	1054.60
1987	46.00	8.60	34.50	26.60	19.30	46.60	59.20	71.15	88.29	62.08	51.60	55.50	569.42
1988	24.80	61.00	24.40	68.90	39.60	18.40	121.90	57.50	78.40	78.50	78.60	38.20	690.20
1989	28.20	16.30	20.40	42.10	82.40	80.60	44.40	53.60	54.90	72.50	85.80	40.40	821.60
Means	44.81	42.17	56.46	64.47	67.59	66.67	65.47	83.98	92.86	64.96	73.96	64.35	767.75

Oakville Southeast WPCP

1975	52.00	73.00	73.00	46.20	70.10	87.20	49.10	116.40	73.90	61.40	48.60	79.10	830.00
1976	66.30	45.90	89.90	72.10	96.60	94.50	94.00	48.30	136.10	50.80	10.40	48.50	853.40
1977	45.40	31.90	79.60	97.90	23.60	75.40	90.50	111.40	196.60	52.90	104.40	103.60	1013.20
1978	77.10	12.70	51.20	56.30	53.20	17.60	19.60	76.40	151.00	67.00	37.20	50.40	669.70
1979	66.00	24.50	49.30	84.40	68.70	44.70	42.24	65.20	44.90	69.30	78.60	115.30	753.14
1980	36.60	15.40	83.10	110.40	48.10	91.90	75.00	75.30	47.20	81.70	40.10	41.60	746.40
1981	12.00	63.90	20.40	56.80	60.50	65.00	84.10	110.70	94.60	129.20	49.40	31.00	777.60
1982	66.50	28.79	60.20	49.38	67.20	145.00	25.30	127.50	122.20	42.00	106.60	87.30	827.97
1983	23.20	49.20	69.80	78.40	110.60	47.40	31.30	90.20	53.40	84.50	112.50	83.40	834.70
1984	33.50	81.00	53.00	53.80	102.00	69.70	76.40	31.80	108.40	18.20	65.40	39.80	733.00
1985	52.40	60.20	48.70	16.80	76.70	33.20	33.80	123.50	196.10	51.20	70.50	178.80	48.85
1986	26.80	37.60	54.20	57.80	61.80	73.50	95.60	82.50	95.60	54.60	48.60	98.00	927.71
1987	61.20	5.60	55.60	54.50	27.20	66.60	208.40	66.60	79.00	49.20	86.80	59.90	820.60
1988	24.80	72.90	28.73	56.70	25.70	14.20	96.80	93.20	65.40	98.60	79.20	40.60	696.83
1989	32.00	18.80	22.30	42.80	92.40	82.80	66.00	71.50	51.10	73.90	87.50	31.60	674.70
Means	45.05	41.43	55.94	62.29	65.63	67.25	72.68	86.05	98.07	66.90	73.74	65.87	791.51

Table 3 (cont'd)

Station	year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total
*Orangeville MOE	1975	52.50	90.60	66.40	57.80	59.40	66.50	85.10	118.00	65.20	28.50	52.50	83.20	825.70
	1976	88.70	91.10	106.20	72.60	85.40	76.30	112.80	58.80	116.70	74.60	35.80	41.70	960.80●
	1977	72.70	33.30	85.20	40.70	23.70	73.00	90.30	164.00	142.90	86.80	85.90	114.80	1013.10
	1978	82.50	17.20	50.00	61.60	100.20	64.80	23.80	153.80	152.20	45.20	63.10	72.80	887.20
	1979	67.20	29.20	83.40	114.20	87.40	78.40	25.00	89.20	37.40	112.20	110.40	91.20	925.20
	1980	47.40	19.30	64.00	111.70	34.20	102.00	156.20	46.00	86.00	66.00	50.80	59.40	843.00
	1981	13.00	53.70	31.20	43.80	60.00	101.80	115.40	136.00	88.80	91.60	61.80	44.80	841.50
	1982	63.20	21.00	70.20	56.00	60.60	132.60	83.80	132.60	110.80	41.20	134.40	102.20	1008.60
	1983	37.80	32.20	66.00	96.20	126.40	35.00	75.40	81.20	43.40	82.00	77.00	96.10	848.50
	1984	41.50	74.00	75.80	50.20	82.20	54.60	49.40	73.80	86.70	49.60	78.40	97.70	813.90
	1985	63.30	108.90	95.70	43.30	91.60	26.60	56.60	148.70	118.90	62.40	114.60	58.80	992.40
	1986	30.80	64.30	59.30	63.10	72.10	106.90	122.00	145.60	218.90	61.60	33.40	53.80	1031.80●
	1987	70.40	20.00	68.70	85.00	33.60	62.00	95.10	91.80	68.50	79.50	93.20	44.90	812.50
	1988	52.80	91.40	32.20	58.90	52.40	48.20	61.20	73.00	106.10	93.50	101.90	37.00	808.60
	1989	49.00	39.60	58.00	47.50	106.20	132.00	26.20	100.60	39.70	75.20	154.60	41.00	869.80
	Means	55.51	52.39	67.49	66.83	71.69	77.38	78.76	107.53	98.81	66.99	83.19	69.27	898.83●

Toronto Pearson International Airport

1975	51.7	72.6	63.9	69.6	64.3	62.6	51.4	108.8	65.4	55	55	55	69.8	790.1
1976	52.5	59.2	116.5	72.1	114.6	83.3	81.8	65	69.9	64.7	64.7	11.9	36.1	827.6
1977	36.9	26.3	71.9	70.3	28.3	104	118.5	103.3	154.2	69.4	69.4	85.9	102.3	971.3
1978	69.2	9.1	39.8	63.9	68.2	25.2	42.5	63.6	134.3	56.2	56.2	52.9	61.1	686
1979	69.6	33.5	48.1	88.6	99.2	71.8	68	74.2	44.5	84.2	84.2	96.5	101	879.2
1980	37.8	16.1	82.8	111.9	48.7	89.2	182.3	37.3	53.1	88.7	35.3	35.3	64.7	847.9
1981	11.9	66.2	17.8	49.7	58.1	61.5	66.6	128.5	103.3	134.9	57.8	57.8	34	790.3
1982	54.3	28.3	64.8	43.1	45.1	112.5	31.1	120.1	128.9	43.5	43.5	94.8	80.9	847.4
1983	33.7	40.6	77.3	83.2	99.5	33	18.3	112.2	54.9	71.8	71.8	89.1	82	795.6
1984	30.2	59	59.5	58.7	102.8	48.1	63.3	63.8	74.7	26.1	26.1	69.9	61.3	717.4
1985	76.6	83.1	78.6	33.1	75.9	37.3	91.5	152.5	57.6	52.3	52.3	161.8	35.9	936.2
1986	26.5	32	48.8	54	75.2	67.4	122.3	146.2	212.3	54.8	44.4	44.4	67.3	951.2
1987	56.6	14.8	44.2	49.8	29.6	68.3	108.1	52.3	108	48.1	48.1	83.4	47.4	710.6
1988	21.5	64.6	23.6	55.2	39.6	25	109.7	37.2	70.6	67.4	67.4	58.1	31.5	604
1989	25.9	19	37.1	41.1	79.2	94.7	70.4	36.6	44.1	76.2	76.2	78.5	23.8	629.6
Means	43.66	41.63	58.31	62.95	68.55	65.59	81.72	86.97	91.72	66.22	66.22	71.69	59.94	798.96

* Station is Located In The Watershed
● Estimate

Table 4. MONTHLY, ANNUAL, AND 15-YEAR MEAN TEMPERATURE AS MEASURED AT VARIOUS METEOROLOGICAL STATIONS IN AND AROUND THE CREDIT RIVER WATERSHED FOR THE PERIOD 1975 - 1989.
(ALL VALUES IN °C)

Station	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean
Abion Field Centre	1975	-4.80	-5.20	-4.00	1.40	15.30	17.80	20.90	19.20	12.60	9.40	6.20	-4.74	7.00
	1976	-10.80	-3.50	-0.80	6.90	10.40	16.50	18.30	17.60	13.60	5.60	-1.20	-8.60	5.50
	1977	-12.30	-6.50	1.70	7.10	12.30	16.10	20.50	17.70	14.50	7.50	3.60	-5.20	6.56
	1978	-9.50	-9.80	-4.60	3.40	12.60	16.80	19.90	19.30	14.10	7.40	2.00	-3.60	5.67
	1979	-8.70	-11.70	-0.60	4.66	11.20	16.20	19.30	16.00	14.50	7.70	3.00	-2.30	6.08
	1980	-6.00	-9.00	-2.70	5.70	13.20	14.40	19.50	19.80	13.80	5.80	0.80	-7.80	5.61
	1981	-11.70	-2.90	-1.30	6.80	10.70	16.80	19.60	18.30	13.30	6.10	2.20	-4.60	6.00
	1982	-11.60	-6.30	-3.50	4.86	13.30	14.70	19.90	16.00	12.15	6.80	3.30	-0.50	5.76
	1983	-5.10	-4.00	0.10	5.00	9.80	16.70	21.10	20.00	14.80	6.00	2.00	-6.70	6.60
	1984	-10.30	-2.80	-5.60	6.10	9.90	16.20	19.40	20.20	12.50	9.20	1.70	-1.20	6.43
	1985	-6.60	-6.50	-1.71	7.10	12.80	15.00	18.80	17.70	15.50	6.60	1.90	-5.70	6.24
	1986	-6.90	-7.70	0.20	7.00	14.30	16.00	20.50	17.44	13.80	8.30	1.50	-2.20	6.65
	1987	-5.30	-7.00	0.30	6.10	14.20	16.20	21.00	18.40	15.00	5.90	1.70	-2.40	7.34
	1988	-6.50	-6.00	-2.30	4.50	13.50	16.90	21.80	20.70	14.20	5.70	3.80	-3.90	6.70
	1989	-3.30	-7.40	-3.80	3.80	12.70	17.50	20.20	18.70	12.15	6.40	0.30	-11.30	5.66
	Means	-6.10	-6.69	-1.62	5.51	12.53	16.65	20.04	18.60	13.77	7.43	2.19	-4.74	6.26

*Georgetown WWTP

1975	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg
1976	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg
1977	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg
1978	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg
1979	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg	Misg
1980	-5.60	-8.00	Misg	5.10	Misg	Misg	Misg	19.80	Misg	14.00	8.20	2.80	-2.00	Misg
1981	-11.20	-2.90	Misg	7.40	11.30	17.30	14.70	19.60	20.10	14.30	6.50	1.40	-6.80	Misg
1982	-10.20	-7.50	-2.70	4.50	14.20	15.20	19.70	16.60	14.30	14.30	6.30	3.30	-3.20	6.70
1983	-4.50	-3.30	0.00	5.20	9.70	17.40	21.20	20.20	15.60	14.30	9.00	3.00	-6.40	6.40
1984	-9.90	-2.20	-5.30	6.20	10.20	17.60	19.00	20.10	13.10	15.60	9.50	1.70	-0.70	7.20
1985	-6.60	-0.70	-0.70	6.90	12.70	14.50	18.30	17.40	15.40	13.40	8.10	2.20	-6.20	6.10
1986	-6.60	-7.30	0.20	6.70	13.80	15.60	19.70	18.90	13.40	13.40	7.80	0.60	-2.50	6.50
1987	-6.60	-6.60	0.10	7.30	13.20	17.50	20.60	17.60	13.60	13.60	5.80	2.20	-1.70	7.00
1988	-6.50	-6.40	-1.60	5.40	13.90	17.40	22.10	20.40	14.70	14.70	6.40	3.60	-3.60	7.00
1989	-3.20	-6.60	-2.80	4.30	12.90	18.20	20.80	18.90	14.80	14.80	9.20	1.40	-10.30	6.50
Means														

*Lakeview MOE

1975	-1.10	-2.10	-1.10	3.70	14.10	17.90	20.60	20.10	14.40	10.40	7.10	-2.60	8.45
1976	-7.60	-0.30	1.60	8.50	11.00	16.40	18.20	18.80	14.40	8.87	4.47	-5.30	7.60
1977	-9.70	-4.90	2.50	6.40	13.30	16.70	19.90	18.80	16.30	8.80	5.00	-1.90	7.60
1978	-6.50	-7.90	-2.50	4.60	11.80	15.11	20.40	20.00	16.00	10.00	4.10	-0.10	7.08
1979	-5.60	-6.70	1.90	5.30	10.60	16.80	21.00	19.00	16.10	8.87	5.20	1.00	7.62
1980	-3.70	-5.80	-0.90	6.20	14.20	15.40	20.60	21.60	15.80	8.10	3.40	-4.50	7.53
1981	-6.50	-1.00	0.70	6.10	11.80	17.20	21.10	20.00	16.10	7.90	4.60	-0.40	6.13
1982	-7.50	-4.40	0.00	5.40	12.80	15.20	21.40	18.20	15.00	10.30	5.10	1.80	7.77
1983	-2.00	-1.40	1.60	6.30	10.60	19.00	22.70	22.10	17.80	10.80	5.20	-3.70	9.08
1984	-6.60	0.20	-2.80	6.90	11.00	16.70	19.90	21.70	15.20	11.20	4.50	2.10	8.50
1985	-5.10	-3.40	2.20	7.10	13.90	16.10	19.90	20.30	16.20	10.90	5.00	-2.50	6.55
1986	-3.20	-3.90	2.20	6.00	14.10	17.10	21.10	18.60	15.00	9.50	3.40	0.90	6.65
1987	-2.80	-3.00	2.40	6.80	14.30	19.90	22.60	20.00	16.90	8.50	5.00	1.30	9.49
1988	-2.90	-5.40	-0.40	6.60	13.50	15.11	23.10	22.00	16.10	8.10	5.90	-0.90	6.36
1989	-0.30	-4.10	-0.70	5.90	12.40	18.30	21.80	19.70	16.70	9.90	3.80	-6.10	7.94
Means	-4.87	-3.74	0.47	6.52	12.63	17.13	20.95	20.13	16.00	9.46	4.76	-1.53	6.16

Table 4 (cont'd)

Station	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean
Oakville Boulevard WFOF	1975	-1.20	-2.20	-1.00	3.90	15.00	18.20	21.20	20.20	14.30	10.50	7.60	-3.10	6.62
	1976	-7.30	-0.50	1.70	6.50	10.90	19.00	19.10	19.20	15.00	7.10	1.40	-5.50	7.38
	1977	-10.10	-4.90	2.10	6.70	13.40	16.30	19.70	18.40	15.80	6.50	4.40	-3.10	7.27
	1978	-7.60	-6.60	-2.70	4.90	11.40	17.90	20.70	20.50	14.35	6.27	3.38	-2.15	6.68
	1979	-4.77	-3.16	0.02	6.30	10.60	17.30	19.29	19.48	15.80	9.60	4.80	0.30	7.79
	1980	-3.80	-3.16	0.02	5.34	11.39	16.24	21.00	21.90	16.10	6.10	3.50	-4.90	7.64
	1981	-6.50	-1.30	1.40	6.10	11.60	17.90	21.10	20.10	15.40	7.40	4.20	-1.90	7.68
	1982	-4.77	-5.90	-0.50	4.60	12.50	14.90	20.00	17.60	14.40	9.70	4.20	1.30	7.42
	1983	-3.50	-2.70	0.50	5.70	9.60	17.80	22.00	20.60	16.60	9.50	3.36	-2.15	6.16
	1984	-7.60	-1.10	-4.00	6.20	10.00	17.80	19.10	21.00	14.20	10.50	3.50	0.90	7.54
	1985	-7.10	-4.50	1.50	6.60	13.00	15.10	19.40	16.90	16.60	9.60	3.70	-4.40	7.40
	1986	-5.50	-5.70	1.00	6.60	13.20	16.00	20.00	18.00	14.20	9.40	1.70	-1.30	7.33
	1987	-4.50	-5.70	1.50	7.40	13.40	16.40	21.20	16.60	15.30	6.70	3.40	0.00	7.68
	1988	-3.70	-3.16	0.02	5.34	13.60	19.00	22.90	21.90	15.60	7.80	5.10	-1.90	6.56
	1989	-0.90	-4.80	-1.20	5.00	12.10	16.00	21.40	19.60	15.50	9.60	2.80	-6.70	7.37
	Means	-5.40	-3.82	0.02	6.05	12.15	17.32	20.58	19.69	15.30	8.62	3.81	-2.44	7.67

*Orangerville MOE

1975	-4.90	-5.90	-4.80	0.80	15.00	17.60	19.70	16.40	12.10	9.20	5.70	-0.60	0.36
1976	-10.80	-4.30	-1.10	6.50	9.90	16.00	18.10	17.01	13.40	5.10	-1.50	-6.90	5.12
1977	-13.00	-7.70	0.50	6.70	13.60	15.10	19.60	17.30	14.10	7.00	2.60	-6.10	5.83
1978	-10.10	-11.90	-5.40	2.50	12.20	16.20	18.60	16.60	13.50	7.40	1.60	-4.40	4.93
1979	-9.50	-13.00	-0.10	3.50	10.60	16.40	18.60	17.00	14.00	7.30	2.30	-2.90	5.36
1980	-7.00	-9.70	-3.70	4.90	12.80	13.60	19.00	19.50	13.40	5.20	0.30	-8.40	5.01
1981	-11.70	-3.50	-1.80	6.00	10.30	16.70	19.00	17.70	13.40	5.60	2.00	-4.40	5.78
1982	-11.90	-8.80	-3.70	3.20	14.40	19.20	15.90	15.90	13.60	8.60	2.70	-0.80	5.54
1983	-6.10	-4.40	-1.00	3.90	8.80	16.70	20.50	19.70	15.70	6.10	1.50	-7.50	6.37
1984	-10.30	-2.60	-6.20	5.90	11.51	17.00	18.50	19.80	12.50	9.40	1.50	-1.80	6.27
1985	-9.70	-7.40	-1.90	7.20	12.50	14.60	16.60	17.80	15.60	6.30	1.50	-6.60	5.66
1986	-7.30	-6.30	-0.60	7.10	13.60	15.20	20.00	17.00	14.00	7.60	0.10	-3.20	6.30
1987	-6.60	-7.20	-0.10	7.90	13.70	17.80	21.30	16.40	14.80	6.00	1.90	-2.40	7.13
1988	-7.10	-6.50	-2.50	4.90	13.40	16.40	21.20	20.00	13.90	5.40	3.20	-4.90	6.28
1989	-4.10	-6.80	-4.30	3.40	11.50	17.20	19.70	16.10	14.10	6.20	0.10	-11.80	5.27
Means	-6.67	-7.47	-2.43	4.66	12.28	16.19	19.49	18.15	13.69	7.24	1.73	-5.39	5.83

Toronto Pearson
International Airport

1975	-3.30	-3.90	-2.40	2.80	15.50	16.10	21.70	20.00	13.10	9.40	6.40	-4.80	7.70
1976	-10.10	-2.70	0.20	7.60	10.60	16.60	16.60	16.60	14.40	6.10	0.10	-7.50	6.20
1977	-11.70	-6.00	2.20	7.40	14.50	16.70	20.50	18.00	15.10	6.00	4.00	-4.50	7.00
1978	-6.60	-10.00	-3.90	4.00	13.20	16.70	20.40	19.70	14.70	6.20	3.00	-2.80	6.20
1979	-7.70	-10.80	1.60	5.30	11.40	17.20	20.50	18.60	14.90	6.50	3.70	-1.10	6.60
1980	-5.10	-7.80	-2.00	6.20	13.60	15.20	20.40	21.30	15.00	7.00	2.10	-6.60	6.60
1981	-10.20	-2.10	0.00	7.60	11.70	17.30	20.60	19.40	14.30	6.50	3.40	-2.90	7.10
1982	-10.10	-7.60	-2.00	4.70	14.30	15.20	20.90	17.30	14.80	9.70	3.90	0.70	6.80
1983	-4.10	-3.10	0.50	5.50	10.10	16.30	22.30	21.00	16.70	6.90	3.30	-6.40	7.80
1984	-9.70	-1.50	-4.60	7.20	10.30	16.10	19.60	21.10	13.90	10.30	2.70	-0.20	7.30
1985	-6.40	-5.80	0.30	7.30	13.10	15.60	19.60	19.40	17.00	9.40	3.40	-4.60	7.20
1986	-5.60	-6.10	0.60	7.60	14.30	16.40	21.00	18.40	14.70	8.70	1.60	-1.20	7.50
1987	-4.60	-5.60	1.80	6.60	14.70	19.60	22.60	19.60	15.50	7.00	3.40	-0.20	6.50
1988	-4.50	-6.80	-0.70	5.90	13.90	17.70	22.90	21.40	15.50	7.20	4.50	-2.80	7.80
1989	-2.20	-6.40	-2.10	5.10	12.90	16.40	21.40	19.60	15.70	9.60	1.60	-10.10	7.00
Means	-7.06	-5.76	-0.70	6.20	12.95	17.27	20.66	19.56	15.02	8.31	3.15	-3.67	7.17

* Station is Located In The Watershed
 • Estimate

Table 5. LIST OF SOIL SERIES IN THE CREDIT RIVER WATERSHED

Soil Number	Soil Name	Soil Symbol
1	Berrien	(Bes)
2	Beverly	(Bys)
3	Bookton	(Bos)
4	Brady	(Bsl)
5	Brant	(Btf)
6	Brantford	(Bds)
7	Brighton	(Brisl)
8	Brisbane	(Bl)
9	Brockport	(Bkc)
10	Burford	(Bu, Bg)
11	Caledon	(Cg)
12	Chingaucousy	(Chc)
13	Colwood	(Cd, Cof, Cs)
14	Cooksville	(Ckc)
15	Donnybrook	(Db, Dk)
16	Dumfries	(Di, Ds, Dr)
17	Farmington	(Fl)
18	Font	(fo)
19	Fox	(Fs, Fn)
20	Gilford	(Gil)
21	Granby	(Grs, Gr)
22	Grimsby	(Gl)
23	Guelph	(Gi)
24	Harriston	(Hi)
25	Hillsburgh	(Hif, His)
26	Honnywood	(Hof)
27	Huron	(Hul)
28	Jeddo	(Jc)
29	Killeen	(Ki)
30	Lily	(Lyl, Li)
31	Listowel	(Lil)
32	Lockport	(Loc)
33	London	(Ll)
34	Malton	(Mac)
35	Milliken	(Mi)
36	Mississauga	(Mic)
37	Muck	(M)
38	Oneida	(Oc, On)
39	Parkhill	(Pal)
40	Peel	(Pec)
41	Pontypool	(Psl)
42	Trafalgar	(Tre)
43	Woburn	(Wol)

Table 6. CHARACTERISTICS OF SOIL SERIES IN THE CREDIT RIVER WATERSHED

Soil Name	Soil Texture	Parent Materials	Natural Drainage	Topography	Surface Stoniness
Berrien	Sandy loam	Sandy outwash over clay	Imperfect	Smooth very gently sloping	Stonefree
Beverly	Silt loam	Lacustrine silty clay loam	Imperfect		
Bookton	Sandy loam	Outwash sand over clay loam till	Good	Smooth gently sloping	Stonefree
Brady	Sandy loam	Outwash sand	Imperfect	Smooth very gently sloping	Stonefree
Brant	Fine sand and silt loam	Fine sand and silt loam	Good		
Brantford	Silt loam	Lacustrine silty clay loam	Good		
Brighton	Sandy loam	Sandy loam outwash	Good	Smooth gently sloping	Stonefree
Brisbane	Loam	Outwash gravel	Imperfect		
Brockport	Clay loam	Over grey shale	Good	Smooth moderately sloping	Few stones
Burford	Loam	Outwash gravel	Good		
Caledon	Fine sandy loam	Fine sand over outwash gravel	Good	Smooth gently to moderately sloping	Few stones
Chinguacousy	Clay loam	Shale & limestone	Imperfect	Smooth gently sloping	Few stones
Colwood	Silt loam	Lacustrine sands and silts	Poor		
Cooksville	Clay loam	Over grey shale	Imperfect	Smooth gently sloping	Few stones
Donnybrook	Sandy loam	Esker and kame gravel	Good		
Dumfries	Loam	Stony loam till	Good	Irregular steeply sloping	Frequent stones
Farmington	Loam	Loam till over bedrock	Good	Smooth gentle sloping	Few to frequent stones
Font	Sandy loam	Outwash gravel	Poor		
Fox	Sandy loam	Outwash sand	Good	Smooth gently sloping	Stonefree
Gilford	Loam	Loam material over outwash gravel	Poor	Smooth very gently sloping	Few stones
Granby	Sady loam	Outwash sand	Poor		
Grimsby	Sandy sandy loam	Medium Sand	Good		
Guelph	Loam	Loam Till	Good		
Harriston	Loam	Loam and silt loam till	Good	Smooth moderately sloping	Few to moderate stones
Hillsburgh	Sandy loam	Outwash fine sand	Good		

Table 6 (cont'd)

Soil Name	Soil Texture	Parent Materials	Natural Drainage	Topography	Surface Stoniness
Honnywood	Fine sandy loam	Loess or alluvium over loam till	Good		
Huron	Loam	Clay loam till	Good		
Jeddo	Clay loam	Heavy textured till Shale and limestone	Poor	Smooth very gently sloping	Few stones
Killeen	Loam	Stony loam till	Imperfect		
Lily	Loam	Stony loam till	Poor	Irregular very gently sloping	Frequent stones
Listowel	Loam	Loam and silt loam till	Imperfect	Smooth gently sloping	Few to moderate stones
Lockport	Clay loam	Clay till over red shale	Good	Smooth steeply sloping	Stonefree
London	Loam	Loam till	Imperfect		
Malton	Clay	Lacustrine over heavy till	Poor	Smooth very gently sloping	Stonefree
Milliken	Loam	Medium textured till Shale and limestone	Imperfect	Smooth gently to smooth moderately sloping	Few stones
Mississauga	Clay loam	Over grey shale	Poor	Smooth very gently sloping	Few stones
Muck	Variable	Organic	Very Poor	Depressional	Stonefree
Oneida	Clay loam	Heavy textured till Shale and limestone	Good	Smooth Moderately sloping	Few stones
Parkhill	Loam	Loam till Limestone and shale	Poor	Smooth very gently sloping	Few to moderate stones
Peel	Clay	Lacustrine over heavy till	Imperfect	Smooth gently sloping	Stonefree
Pontypool	Sandy loam	Poorly sorted outwash	Good	Irregular steeply sloping	Few stones
Trafalgar	Clay	Shallow soil over red shale	Imperfect	Smooth gently sloping	Stonefree
Woburn	Loam	Medium textured till Shale and limestone	Good	Smooth steeply sloping	Few stones

Table 7. TRANSMISSIVITY VALUES (m^2/day) FOR WELLS COMPLETED IN VARIOUS BEDROCK HYDROGEOLOGIC UNITS

Hydrogeologic Unit	Number of Wells	10 Percentile	Mean	90 Percentile
Georgian Bay Formation	39	0.7	3.3	15.6
Queenston Formation	671	0.7	5.8	44.9
Cataract Group	158	0.8	4.0	26.3
Amabel Formation	1433	3.8	29.0	277.9
Guelph Formation	166	7.2	47.0	296.2

Table 8. TRANSMISSIVITY VALUES (m^2/day) FOR WELLS COMPLETED IN VARIOUS OVERBURDEN HYDROGEOLOGIC UNITS

Hydrogeologic Unit	Number of Wells	10 Percentile	Mean	90 Percentile
Sandy silt to sand till	102	4.3	29.7	645.8
Silt to clayey silt till	216	1.4	9.6	52.5
Ice-contact stratified drift	193	2.9	29.1	360.3
Meltwater channels	134	5.4	46.8	738.1
Glacio-fluvial deposits	73	4.1	19.7	162.1

Table 9. Results of streamflow analyses for various stations and segments in the study area for the period 1987–90

1987			
Area Code	Drainage Area in Square km	Annual Surface Runoff (mm)	Annual Baseflow (mm)
S1	62	257	172
S2	60	373	220
S3	83	247	151
S4	32	479	364
S5	165	399	294
S6	127	310	148
S7	266	496	104
1988			
Area Code	Drainage Area in Square km	Annual Surface Runoff (mm)	Annual Baseflow (mm)
S1	62	217	154
S2	60	297	217
S3	83	193	110
S4	32	440	356
S5	165	335	276
S6	127	233	133
S7	266	266	60
1989			
Area Code	Drainage Area in Square km	Annual Surface Runoff (mm)	Annual Baseflow (mm)
S1	62	227	168
S2	60	328	243
S3	83	158	117
S4	32	427	329
S5	165	300	233
S6	127	221	119
S7	266	256	78
1990			
Area Code	Drainage Area in Square km	Annual Surface Runoff (mm)	Annual Baseflow (mm)
S1	62	282	183
S2	60	408	253
S3	83	199	131
S4	32	477	348
S5	165	445	277
S6	127	330	158
S7	266	251	89

Table 10. LONG-TERM (1987- 90) ANNUAL WATER BUDGET FOR VARIOUS SUB-WATERSHED AND SEGMENTS IN THE STUDY AREA

ORANGEVILLE GAUGING STATION

(Precipitation data for Orangeville Meteorological Station)

Station No.	02HB013
Area Code	S1
Drainage Area (km ²)	62
Mean Annual Precipitation (mm)	883
Mean Annual Evapotranspiration (mm)	637
Mean Annual Runoff (mm)	246
Mean Annual Baseflow (mm)	169

ALTON GAUGING STATION

(Precipitation data from Orangeville Meteorological Station)

Station No.	02HB019
Area Code	S2
Drainage Area (km ²)	60
Mean Annual Precipitation (mm)	883
Mean Annual Evapotranspiration (mm)	532
Mean Annual Runoff (mm)	351
Mean Annual Baseflow (mm)	233

SEGMENT S3 EXTENDING BETWEEN ORANGEVILLE, ALTON AND CATARACT GAUGING STATIONS

(Precipitation data from Orangeville Meteorological Station)

Area Code	S3
Drainage Area (km ²)	83
Mean Annual Precipitation (mm)	883
Mean Annual Evapotranspiration (mm)	684
Mean Annual Runoff (mm)	199
Mean Annual Baseflow (mm)	127
Mean Annual Groundwater	

ERIN GAUGING STATION

(Precipitation data from Orangeville Meteorological Station)

Station Code	02HB020
Area Code	S4
Drainage Area (km ²)	32
Mean Annual Precipitation (mm)	883
Mean Annual Evapotranspiration (mm)	427
Mean Annual Runoff (mm)	455
Mean Annual Baseflow (mm)	349

Table 10 (cont'd)

**SEGMENT S5 EXTENDING BETWEEN ERIN, CATARACT AND BOSTON MILLS
GAUGING STATIONS**

(Precipitation data from Georgetown WWTP Meteorological Station)

Area Code	S5
Drainage Area (km ²)	165
Mean Annual Precipitation (mm)	809
Mean Annual Evapotranspiration (mm)	440
Mean Annual Runoff (mm)	369
Mean Annual Baseflow (mm)	270

NORVAL S.CR. GAUGING STATION

(Precipitation data fro Georgetown Meteorological Station)

Station Code	02HB008
Area Code	S6
Drainage Area (km ²)	127
Mean Annual Precipitation (mm)	809
Mean Annual Evapotranspiration (mm)	536
Mean Annual Runoff (mm)	273
Mean Annual Baseflow (mm)	139

**SEGMENT S7 EXTENDING BETWEEN BOSTON MILLS, NORVAL S. CR. AND
ERINDALE GAUGING STATIONS**

**(Precipitation data fro Pearson International Airport
Meteorological Station)**

Area Code	S7
Drainage Area (km ²)	266
Mean Annual Precipitation (mm)	689
Mean Annual Evapotranspiration (mm)	372
Mean Annual Runoff (mm)	317
Mean Annual Baseflow (mm)	83

Table 11. LOCATIONS AND DESCRIPTIONS OF WATER QUALITY DATA POINTS
IN THE BEDROCK

SITE #	COUNTY	TOWNSHIP	CONC.	LOT	WELL NAME	WELL TYPE	DEPTH WATER FOUND (m)	MOE WELL #	UTM EASTING	UTM NORTHING
1	Peel	Caledon	HS E1	16	Caledon Well # 1	M	-	-	581175	4857950
2	Peel	Caledon	HS E1	16	Caledon Well # 2	M	-	-	581080	4857900
3	Peel	Caledon	HS W1	22	McLeodville Well # 1	M	-	-	577700	4859400
4	Peel	Caledon	HS W1	22	McLeodville Well # 2	M	-	-	577670	4859470
5	Peel	Caledon	HS W1	22	McLeodville Well # 3	M	25.3 , 26.8	-	577650	4859470
6	Peel	Caledon	HS E2	22	Skywood Park Well # 1	M	25.9 , 30.5	-	578925	4861790
7	Peel	Caledon	HS E2	22	Skywood Park Well # 2	M	26.8 , 30.5 , 43.9	-	579070	4861860
8	Peel	Caledon	HS E2	23	Skywood Park Well # 3	M	18.3	-	578710	4861930
9	Halton	Esquesing	3	31	Acton, Davidson Well # 1	M	-	-	576855	4833065
10	Halton	Esquesing	3	31	Acton, Davidson Well # 2	M	-	-	576850	4833060
11	Halton	Esquesing	4	32	Acton, 4th Line Well	M	-	-	576980	4835080
12	Halton	Esquesing	3	30	Acton, 2nd Line Well	M	12.2	868	576585	4831750
13	Halton	Esquesing	3	29	Acton, Warren Grove Well	M	-	-	577460	4831810
14	Wellington	Erin	10	17	Erin Well # 5	M	-	-	574279	4847742
15	Wellington	Erin	9	17	Erin Well # 7	M	15.2	-	573357	4847185
16	Wellington	Erin	9	17	Erin Well # 8	M	18.9	-	573315	4846623
17	Wellington	Erin			Hillsburgh Well # 1	M	-	-	569065	4848969
18	Wellington	Erin	8	25	Hillsburgh Well # 2	M	-	-	568233	4849270
19	Dufferin	Town of Orangeville	8	26	Orangeville Well # 2 A	M	-	-	570115	4862274
20	Dufferin	Town of Orangeville			Orangeville Well # 3	M	-	-	570669	4862420
21	Dufferin	Town of Orangeville			Orangeville Well # 4	M	-	-	571355	4862499
22	Dufferin	Town of Orangeville			Orangeville Well # 6	M	-	-	571364	4860338
23	Dufferin	Town of Orangeville			Orangeville Well # 7	M	-	-	570489	4862848
24	Dufferin	Town of Orangeville			Orangeville Well # 8A	M	-	-	570813	4863958
25	Dufferin	Town of Orangeville			Orangeville Well # 8B	M	-	-	570800	4864013
26	Dufferin	Town of Orangeville			Orangeville Well # 8C	M	-	-	570740	4864046

Table 11 (Cont'd)

SITE #	COUNTY	TOWNSHIP	CONC.	LOT	WELL NAME	WELL TYPE	DEPTH WATER FOUND (m)	MOE WELL #	UTM EASTING	UTM NORTHING
27	Dufferin	East Garafraxa	C	4	Orangeville Well # 9	M	—	—	569890	4861900
28	Dufferin	Mono	HSE 1	1	Purple Hill # 1	M	—	—	574600	4864020
29	Dufferin	Mono	HSE 1	1	Purple Hill # 2	M	19.2	—	574600	4864070
30	Dufferin	Mono	HSE 1	1	Purple Hill # 3	M	19.8	—	574560	4864015
31	Dufferin	Mono	HSE 1	1	Purple Hill # 4	M	6.1	—	574480	4864090
32	Dufferin	Mono	HSE 1	1	Purple Hill # 5	M	6.1	—	574350	4864130
33	Dufferin	Mono	HSW 2	6	Cardinal Woods Well # 1	M	36.89	—	571280	4865910
34	Dufferin	Mono	HSW 2	6	Cardinal Woods Well # 2	M	—	—	571400	4865980
35	Dufferin	Mono	HSW 2	6	Brett Farm Subdv.	M	23.8, 25.9, 29.0	—	571625	4866140
36	Dufferin	Amaranth	1	3	United Lands Pump Well	M	—	—	569350	4863940
37	Peel	Chinguacousy	HSW 1	18	Private Well	P	22.9	4557	593468	4842255
38	Peel	Chinguacousy	HSW 6	33	Private Well	P	10.1	3117	583075	4844155
39	Peel	Chinguacousy	HSW 6	33	Private Well	P	12.2, 20.7	3075	584065	4844645
40	Peel	Caledon	HSW 1	7	Private Well	P	42.7, 46.6	4042	584030	4853075
41	Peel	Caledon	HSW 2	30	Test Well	T	29.3, 32.9, 36.6	—	572840	4861310
42	Peel	Caledon	HSW 3	5	Private Well	P	10.7	4404	583075	4850450
43	Peel	Caledon	HSW 4	1	Private Well	P	18.3	3962	584475	4846775
44	Peel	Caledon	HSW 4	6	Private Well	P	23.5	4573	582050	4849255
45	Peel	Caledon	HSW 4	16	Private Well	P	18.3	3531	577150	4852600
46	Peel	Caledon	HSW 5	25	Private Well	P	56.7	3146	573052	4859323
47	Peel	Caledon	HSW 6	7	Private Well	P	31.7	1046	580090	4848500
48	Peel	Caledon	HSW 6	16	Private Well	P	25.3	1054	576073	4851578
49	Peel	Caledon	HSW 6	17	Private Well	P	29.0	4485	575782	4851619
50	Peel	Caledon	HSW 6	19	Private Well	P	45.1	1057	575063	4853650
51	Peel	Caledon	HSW 6	25	Private Well	P	32.0	1063	572048	4855147
52	Peel	Caledon	HSW 6	29	Private Well	P	45.4	1068	571049	4857900
53	Peel	Caledon	HSW 6	30	Private Well	P	54.9, 71.6	4368	569763	4857551

Table 11 (Cont'd)

SITE #	COUNTY	TOWNSHIP	CONC.	LOT	WELL NAME	WELL TYPE	DEPTH WATER FOUND (m)	MOE WELL #	UTM EASTING	UTM NORTHING
54	Peel	Caledon	HSE1	17	Private Well	P	14.0, 21.3	573	581055	4859295
55	Peel	Caledon	HSE1	20	Private Well	P	18.9	2919	579070	4859100
56	Peel	Caledon	HSE1	22	Private Well	P	24.4	4631	578741	4860377
57	Peel	Caledon	HSE1	26	Private Well	P	16.8	582	578048	4863045
58	Peel	Caledon	HSE2	26	Private Well	P	24.7	3126	578050	4864282
59	Peel	Caledon	HSE3	16	Private Well	P	27.4	624	583065	4860250
60	Peel	Caledon	HSE3	20	Private Well	P	37.8	3952	581070	4861875
61	Peel	Caledon	HSE4	16	Private Well	P	39.6, 50.3	4340	583010	4861235
62	Peel	Brampton (Ching.)	HS W1	17	Private Well	P	30.5	1615	593951	4841959
63	Peel	Brampton (Ching.)	HS W3	9	Private Well	P	14.6	1804	596597	4836879
64	Peel	Mississauga (Toronto)	DS S3	35	Private Well	P	6.1	—	610500	4815630
65	Halton	Esquesing	6	22	Private Well	P	16.8, 19.8, 27.4	1053	583102	4832837
66	Halton	Esquesing	6	30	Private Well	P	19.8, 25.9	1085	579600	4836266
67	Halton	Esquesing	9	21	Private Well	P	9.1	1412	585420	4834700
68	Halton	Esquesing	9	21	Private Well	P	12.8, 19.8	4957	585500	4834500
69	Halton	Esquesing	9	32	Private Well	P	—	—	581525	4840400
70	Halton	Esquesing	11	27	Private Well	P	16.5	1632	584440	4839450
71	Wellington	Erin	6	1	Private Well	P	16.8, 25.0	662	577930	4836250
72	Wellington	Erin	9	13	Private Well	P	18.0	3349	575500	4845520
73	Wellington	Erin	9	13	Private Well	P	45.1	3175	575250	4844850
74	Wellington	Erin	9	23	Private Well	P	45.1	771	570650	4848960
75	Wellington	Erin	9	27	Private Well	P	32.9	6108	569500	4851750
76	Wellington	Erin	10	6	Private Well	P	9.8	5168	579900	4843750
77	Wellington	Erin	10	21	Private Well	P	—	—	573210	4850150
78	Wellington	Erin	11	15	Private Well	P	3.7	813	575806	4848077
79	Wellington	Erin	11	17	Private Well	P	—	—	575460	4849800
80	Wellington	Village of Erin			Municipal Test Well 1/85	T	9.1	—	575150	4847650

Table 11 (Cont'd)

SITE #	COUNTY	TOWNSHIP	CONC.	LOT	WELL NAME	WELL TYPE	DEPTH WATER FOUND (m)	MOE WELL #	UTM EASTING	UTM NORTHING
81	Wellington	Village of Erin			Private Well	P	25.9, 45.4	5649	573800	4847702
82	Wellington	Village of Erin			Private Well	P	41.5	—	573806	4847702
83	Wellington	Village of Erin			Private Well	P	21.3	—	573950	4847800
84	Wellington	Village of Erin			Test Well # 1	T	9.8, 12.5	7552	574300	4847500
85	Wellington	Village of Erin			Test Well # 2	T	6.1, 9.1	7551	574150	4847700
86	Dufferin	Mono	HS W2	5	Private Well	P	50.0	—	571706	4865730
87	Dufferin	Mono	HS W2	6	Willmore Ltd Test Well	T	36.9	—	571300	4865970
88	Dufferin	Mono	HS W3	1	Private Well	P	—	—	569820	4862325
89	Dufferin	Mono	HS W3	3	Private Well	P	30.5	—	569700	4863830
90	Dufferin	Mono	HS E1	2	Private Well	P	37.2	1282	574900	4864435
91	Dufferin	Anaranth	1	4	Private Well	P	—	—	569310	4864090
92	Dufferin	East Garafraxa	C	5	Private Well	P	41.2	1356	568825	4861930

TABLE REMARKS

WELL TYPE CODE

M = Municipal Water Supply

P = Private Water Supply

T = Test Well

UTM ZONE = 17

— = No Data

Table 12. LOCATIONS AND DESCRIPTIONS OF WATER QUALITY DATA POINTS
IN THE OVERBURDEN

SITE #	COUNTY	TOWNSHIP	CONC.	LOT	WELL NAME	WELL TYPE	DEPTH WATER FOUND (m)	MOE WELL #	UTM EASTING	UTM NORTHING
1	Peel	Caledon	HS W1	2	Inglewood Well # 1	M	5.2	—	587050	4850630
2	Peel	Caledon	HS W1	2	Inglewood Well # 2	M	4.9	—	587060	4850580
3	Peel	Caledon	HS W3	22	Alton Well # 1	M	17.4	—	576050	4857295
4	Peel	Caledon	HS W3	22	Alton Well # 2	M	14.6	—	576060	4857290
5	Peel	Caledon	HS W3	23	Alton Well # 3	M	—	—	576075	4858080
6	Peel	Caledon	HS W3	23	Alton Well # 4	M	—	—	576070	4858090
7	Peel	Caledon	HS W1	13	Caledon Well # 3	M	—	—	582070	4856350
8	Peel	Caledon	HS W1	13	Caledon Well # 4	M	—	—	582080	4856345
9	Halton	Esquesing	2	28	Acton, Prospect Park Well	M	—	—	576800	4830650
10	Halton	Esquesing	9	17	Georgetown Well # 1	M	13.7	—	587060	4832980
11	Halton	Esquesing	9	17	Georgetown Well # 2	M	—	—	587445	4832750
12	Halton	Esquesing	9	17	Georgetown Well # 3	M	—	—	587460	4832660
13	Halton	Esquesing	9	17	Georgetown Well # 4	M	—	—	587440	4832745
14	Halton	Esquesing	9	17	Georgetown Well # 4A	M	—	—	587450	4832755
15	Halton	Esquesing	9	16	Georgetown Well # 5	M	—	—	588145	4832955
16	Halton	Esquesing	9	16	Georgetown Well # 6	M	—	—	588140	4832945
17	Dufferin	Town of Orangeville			Orangeville Well # 5	M	—	—	569578	4862471
18	Dufferin	Town of Orangeville			Orangeville Well # 5A	M	—	—	569580	4862473
19	Dufferin	Mono	HSE 1	2	Island Lake Est.	M	57.9	—	574600	4865720
20	Dufferin	Mono	HS E 2	1	Coles Devl. Well # 1	M	18.3, 25.0	—	576170	4864480
21	Peel	Chinguacousy	HS W1	32	Private Well	P	22.9	1654	589045	4850175
22	Peel	Chinguacousy	HS W1	34	Private Well	P	40.5	1668	587095	4850200
23	Peel	Chinguacousy	HS W2	33	Private Well	P	1.8, 4.3	1737	586761	4847781
24	Peel	Chinguacousy	HS W4	29	Private Well	P	70.7	3868	586045	4841850
25	Peel	Chinguacousy	HS W5	24	Private Well	P	41.2	3164	588065	4842300
26	Peel	Chinguacousy	HS W6	18	Private Well	P	10.5	3082	590085	4837195
27	Peel	Chinguacousy	HS W6	21	Private Well	P	4.9, 7.6	3989	588095	4838800

Table 12 (Cont'd)

SITE #	COUNTY	TOWNSHIP	CONC.	LOT	WELL NAME	WELL TYPE	DEPTH WATER FOUND (m)	MOE WELL #	UTM EASTING	UTM NORTHING
28	Peel	Chinguacousy	HS W6	27	Private Well	P	37.5	3286	586250	4841150
29	Peel	Chinguacousy	HS E1	34	Private Well	P	1.5	4351	588269	4850794
30	Peel	Chinguacousy	HS E3	33	Private Well	P	6.1	4082	589720	4851450
31	Peel	Chinguacousy	HS E5	33	Private Well	P	18.9	1498	591835	4854821
32	Peel	Caledon	HS W1	9	Private Well	P	14.0	4428	584030	4853780
33	Peel	Caledon	HS W1	10	Private Well	P	—	—	582810	4854320
34	Peel	Caledon	HS W1	26	Private Well	P	34.1	801	576180	4860921
35	Peel	Caledon	HS W2	11	Private Well	P	4.0	842	582090	4853870
36	Peel	Caledon	HS W2	16	Private Well	P	—	—	579110	4854860
37	Peel	Caledon	HS W2	17	Private Well	P	22.0	848	580044	4857098
38	Peel	Caledon	HS W2	26	Private Well	P	8.8	3272	576080	4860670
39	Peel	Caledon	HS W2	28	Private Well	P	35.7	4360	572095	4860933
40	Peel	Caledon	HS W3	8	Private Well	P	7.6	872	582080	4849255
41	Peel	Caledon	HS W3	8	Private Well	P	—	—	581270	4850710
42	Peel	Caledon	HS W3	15	Private Well	P	45.7	880	579100	4854035
43	Peel	Caledon	HS W3	25	Private Well	P	44.2	904	575052	4859323
44	Peel	Caledon	HS W4	14	Private Well	P	14.3	946	579090	4852800
45	Peel	Caledon	HS W4	18	Private Well	P	3.0, 4.6	950	577067	4857645
46	Peel	Caledon	HS W4	29	Private Well	P	—	—	571890	4859220
47	Peel	Caledon	HS W4	31	Private Well	P	24.1	986	571050	4860600
48	Peel	Caledon	HS W5	6	Private Well	P	22.3	1000	582050	4848030
49	Peel	Caledon	HS W5	7	Private Well	P	14.6	1003	581085	4848400
50	Peel	Caledon	HS W5	15	Private Well	P	3.7	1027	576145	4851930
51	Peel	Caledon	HS E1	4	Private Well	P	34.1	3614	586090	4852580
52	Peel	Caledon	HS E1	11	Private Well	P	51.5	746	583030	4854740
53	Peel	Caledon	HS E2	3	Private Well	P	7.6	3165	587740	4853370
54	Peel	Caledon	HS E2	11	Private Well	P	41.8	3299	584095	4856135

Table 12 (Cont'd)

SITE #	COUNTY	TOWNSHIP	CONC.	LOT	WELL NAME	WELL TYPE	DEPTH WATER FOUND (m)	MOE WELL #	UTM EASTING	UTM NORTHING
55	Peel	Caledon	HS E3	2	Private Well	P	5.5	3129	588785	4854060
56	Peel	Caledon	HS E3	5	Private Well	P	33.5	3712	589050	4855735
57	Peel	Caledon	HS E3	7	Private Well	P	—	615	586045	4856135
58	Peel	Caledon	HS E3	15	Private Well	P	1.5	3232	582750	4858870
59	Peel	Caledon	HS E4	1	Private Well	P	4.5	3396	589450	4853840
60	Peel	Caledon	HS E4	4	Private Well	P	3.7	637	588846	4856156
61	Peel	Caledon	HS E4	5	Private Well	P	—	—	588700	4856250
62	Peel	Caledon	HS E4	7	Private Well	P	29.9	4443	587765	4857081
63	Peel	Caledon	HS E4	8	Private Well	P	73.5	3179	587270	4857820
64	Peel	Caledon	HS E5	11	Private Well	P	25.0	3713	586350	4858940
65	Peel	Caledon	HS E6	1	Private Well	P	14.0	668	592246	4856537
66	Peel	Brampton (Ching.)	HS W3	5	Private Well	P	14.3	1775	597887	4834904
67	Peel	Brampton (Ching.)	HS W5	5	Private Well	P	3.4	3813	595940	4832230
68	Peel	Brampton (Ching.)	HS W5	15	Private Well	P	1.5	3275	592500	4837100
69	Peel	Brampton (Ching.)	HS W6	7	Private Well	P	13.4	4979	594040	4831870
70	Peel	Brampton (Toronto)	HS W4	15	Private Well	P	10.4	2676	598887	4830997
71	Peel	Brampton (Toronto)	HS W5	15	Private Well	P	—	—	598730	4830910
72	Peel	Brampton (Toronto)	HS W6	15	Private Well	P	20.4	3872	598020	4829480
73	Peel	Mississauga (Toronto)	HS W3	10	Private Well	P	6.1	2590	603118	4830361
74	Peel	Mississauga (Toronto)	HS W3	11	Private Well	P	19.2	2604	602219	4831079
75	Peel	Mississauga (Toronto)	HS W3	11	Private Well	P	25.6	2612	602360	4831215
76	Peel	Albion	1	17	Private Well	P	18.3	—	592650	4856280
77	Halton	Esquesing	4	28	Private Well	P	—	—	578860	4832530
78	Halton	Esquesing	7	16	Private Well	P	8.2	1124	586576	4831085
79	Halton	Esquesing	7	16	Private Well	P	6.1, 7.9	5270	586800	4830900
80	Halton	Esquesing	7	17	Private Well	P	6.7	1130	585474	4830856
81	Halton	Esquesing	7	17	Private Well	P	4.6	1128	585893	4831444

Table 12 (Cont'd)

SITE #	COUNTY	TOWNSHIP	CONC.	LOT	WELL NAME	WELL TYPE	DEPTH WATER FOUND (m)	MOE WELL #	UTM EASTING	UTM NORTHING
82	Halton	Esquesing	9	23	Private Well	P	—	—	585040	4836740
83	Halton	Esquesing	10	18	Private Well	P	15.2	2966	588360	4835200
84	Halton	Esquesing	11	1	Private Well	P	—	5235	596620	4829120
85	Halton	Esquesing	11	10	Private Well	P	—	—	592280	4832550
86	Wellington	Erin	7	22	Private Well	P	—	—	569300	4846860
87	Wellington	Erin	7	28	Private Well	P	—	—	567460	4849910
88	Wellington	Erin	8	24	Private Well	P	6.4	—	569280	4848660
89	Wellington	Erin	8	24	Private Well	P	5.5	—	569710	4849200
90	Wellington	Erin	8	24	Private Well	P	9.1	—	569560	4849830
91	Wellington	Erin	9	15	OW1 –90	T	12.2	—	574650	4846245
92	Wellington	Erin	9	15	OW2 –90	T	11.6	—	574800	4846270
93	Wellington	Erin	9	15	OW3 –90	T	6.4	—	574750	4846525
94	Wellington	Erin	9	24	Private Well	P	6.4	—	570210	4849480
95	Wellington	Erin	10	13	Bel –Erin Subdv. TW#1	T	12.5	—	576340	4845840
96	Wellington	Erin	10	13	Bel –Erin Subdv. TW#2	T	11.3	—	576250	4845790
97	Wellington	Erin	10	23	Private Well	P	—	—	571990	4850440
98	Dufferin	Mono	HS W3	1	Private Well	P	3.0	—	569800	4862425
99	Dufferin	Mono	HS W3	3	Private Well	P	—	—	569640	4863625

TABLE REMARKS

WELL TYPE CODE

M = Municipal Water Supply

P = Private Water Supply

T = Test Well

UTM ZONE = 17

-- = No Data

TABLE 13: A SUMMARY OF MAJOR ION CONCENTRATIONS IN GROUNDWATER

1: SAMPLES FROM BEDROCK WELLS

	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS (mg/L as CaCO3)	ALKALINITY (mg/L as CaCO3)	HCO3 (mg/L)	CALCIUM (mg/L)	MAGNESIUM (mg/L)	SODIUM (mg/L)	POTASSIUM (mg/L)	CHLORIDE (mg/L)	SULPHATE (mg/L)
MEAN	888.17	383.62	247.76	302.07	106.25	27.23	42.45	2.98	65.92	137.43
MINIMUM	385.00	151.50	120.00	146.30	31.00	4.00	1.60	0.35	0.10	0.50
MAXIMUM	5400.00	1860.00	484.50	590.71	508.00	60.00	873.30	27.19	1380.00	1600.00

2: SAMPLES FROM OVERBURDEN WELLS

	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS (mg/L as CaCO3)	ALKALINITY (mg/L as CaCO3)	HCO3 (mg/L)	CALCIUM (mg/L)	MAGNESIUM (mg/L)	SODIUM (mg/L)	POTASSIUM (mg/L)	CHLORIDE (mg/L)	SULPHATE (mg/L)
MEAN	646.66	310.56	248.02	302.39	92.68	22.44	27.01	1.71	60.92	39.83
MINIMUM	271.00	174.00	123.00	149.96	11.30	12.80	4.00	0.35	3.50	14.10
MAXIMUM	1520.00	505.10	357.00	435.26	160.00	49.65	104.00	8.72	262.00	84.60

Table 14. BEDROCK WATER QUALITY DATA USED IN DUROV PROGRAM

SITE #	DATE SAMPLED	CATIONS				ANIONS			
		Ca (mg/L)	Mg (mg/L)	Na (mg/L)	K (mg/L)	ALKALINITY (mg/L as CaCO3)	SO4 (mg/L)	NITRATES (mg/L as NO3)	Cl (mg/L)
1	Dec 22, 1988	104.00	35.70	63.60	0.95	298.60	41.48	4.60	139.00
2	Jun 02, 1993	100.00	28.20	105.00	1.00	308.20	29.73	3.10	174.00
3	Jun 18, 1991	108.00	47.50	106.00	8.60	298.00	49.03	2.70	268.00
4	May 27, 1992	83.30	44.55	167.00	19.40	203.00	55.37	4.45	367.00
5	Jun 02, 1993	99.50	37.80	50.60	0.98	280.50	32.15	2.20	130.00
6	Jun 02, 1993	74.40	28.95	17.40	0.80	269.70	21.90	1.10	35.80
7	Jun 02, 1993	60.70	23.90	2.40	0.89	225.60	17.94	0.10	0.80
8	Jun 02, 1993	59.60	23.15	2.90	0.86	221.20	19.09	0.40	1.80
9	Aug 18, 1987	70.00	23.50	11.00	1.50	245.00	27.00	2.46	16.90
10	Aug 18, 1987	75.00	23.50	9.80	1.50	251.00	27.60	2.31	14.80
11	Aug 18, 1987	90.00	24.10	8.20	1.30	241.00	76.40	1.98	11.70
12	Aug 18, 1987	91.00	33.20	64.00	2.10	275.00	55.40	2.43	122.70
13	Jun 16, 1987	81.00	29.30	4.90	1.30	260.00	63.40	0.90	5.10
14	Jul 02, 1987	96.40	30.90	22.40	1.60	225.60	144.00	0.15	32.00
15	Jan 31, 1986	98.00	31.00	13.50	1.45	195.00	184.00	0.10	11.60
16	Jan 1992	111.00	28.10	5.26	1.80	207.00	179.00	<0.03	2.50
17	Jan 29, 1991	91.80	23.65	27.60	1.34	268.20	50.79	3.92	50.40
19	Aug 10, 1993	75.80	23.90	11.10	1.19	249.10	48.31	1.80	14.60
20	Feb 01, 1993	85.30	26.90	5.12	1.21	269.30	56.33	0.02	12.90
21	May 03, 1993	107.95	29.82	27.42	1.81	314.90	72.21	0.03	55.10
22	May 03, 1993	94.40	25.98	5.37	1.20	262.30	85.38	0.03	11.60
23	Aug 10, 1993	71.50	23.90	3.21	1.06	242.90	42.19	0.01	8.00
24	May 03, 1993	74.70	25.56	4.05	1.13	252.00	46.04	0.01	8.70
25	Aug 10, 1993	71.50	24.80	3.63	1.12	237.30	51.08	0.04	8.00
26	Feb 02, 1993	61.60	22.10	3.43	1.10	228.80	28.42	0.09	3.00
27	Apr 1988	76.00	22.00	6.50	0.70	250.00	19.00	0.69	13.00
28	Sep 30, 1993	113.00	34.80	92.30	1.00	305.00	29.80	6.80	171.00
29	Sep 30, 1993	101.00	37.50	60.50	1.00	319.00	33.90	5.80	138.00
30	Sep 30, 1993	109.00	32.90	86.20	1.00	295.00	30.00	6.20	172.00
31	Sep 30, 1993	110.00	37.70	86.80	1.00	329.00	25.90	2.10	180.00
32	Sep 30, 1993	104.00	36.30	56.30	1.00	324.00	24.00	6.10	133.00
33	Sep 30, 1993	69.10	26.00	17.50	1.00	233.00	31.40	0.40	31.50
34	Sep 30, 1993	85.40	22.70	34.70	1.00	262.00	28.00	0.40	60.80
35	Jan 23, 1990	72.20	20.90	4.80	1.10	241.00	26.90	0.17	18.50
36	Apr 23, 1990	61.70	19.80	2.90	1.10	216.00	23.90	0.10	2.10
41	Aug 25, 1992	57.90	17.00	6.40	1.30	193.00	25.50	0.10	4.80
43	May 16, 1980	89.00	21.00	6.00	2.00	261.00	30.00	1.20	14.00
49	Jul 08, 1980	508.00	60.00	22.00	3.50	185.00	1300.00	0.10	6.00
53	May 22, 1980	205.00	40.00	19.00	1.70	138.00	560.00	0.10	1.00
55	May 23, 1980	90.00	25.00	8.00	0.80	263.00	26.00	1.00	34.00
62	May 26, 1980	495.00	53.00	183.00	18.00	191.00	1220.00	0.40	275.00
63	May 15, 1980	232.00	42.00	54.00	8.00	345.00	380.00	0.30	79.00
64	Jul 12, 1991	85.20	20.10	873.30	27.19	164.40	47.62	0.10	1380.00
65	May 20, 1980	166.00	19.00	29.00	6.10	307.00	53.00	0.60	134.00

Table 14 (Cont'd)

SITE #	DATE SAMPLED	CATIONS				ANIONS			
		Ca (mg/L)	Mg (mg/L)	Na (mg/L)	K (mg/L)	ALKALINITY (mg/L as CaCO3)	SO4 (mg/L)	NITRATES (mg/L as NO3)	Cl (mg/L)
66	Unknown	103.00	36.30	7.20	0.84	263.50	147.00	0.15	22.50
67	Jul 04, 1980	88.00	29.00	6.00	9.20	313.00	25.00	1.50	9.00
68	May 16, 1980	220.00	23.00	196.00	20.00	209.00	720.00	0.30	106.00
69	May 20, 1980	112.00	23.00	13.00	3.50	278.00	53.00	0.10	49.00
70	May 16, 1980	170.00	39.00	42.00	15.00	441.00	33.00	6.20	128.00
71	May 20, 1980	104.00	35.00	3.00	1.00	230.00	170.00	0.10	4.00
72	Jul 04, 1980	81.00	13.00	5.00	0.90	201.00	59.00	0.10	2.00
73	May 21, 1980	152.00	27.00	9.00	1.10	175.00	335.00	0.10	2.00
75	May 23, 1980	50.00	15.00	11.00	1.00	170.00	40.00	0.10	1.00
76	May 20, 1980	107.00	40.00	46.00	1.10	355.00	100.00	0.10	42.00
77	Jul 07, 1980	120.00	8.00	5.00	1.00	206.00	116.00	0.40	3.00
78	May 22, 1980	112.00	4.00	6.00	1.00	239.00	17.00	5.00	25.00
79	Jul 08, 1980	147.00	23.00	6.00	1.00	197.00	245.00	0.10	1.00
80	Jan 27, 1986	76.00	25.50	11.00	1.45	241.00	36.00	2.90	21.20
87	Mar 29, 1978	65.00	20.00	3.00	1.10	228.00	23.00	0.10	2.00
88	Oct 04, 1991	67.60	27.50	49.30	1.72	208.00	21.40	7.50	37.80
89	Oct 04, 1991	58.50	23.30	3.39	0.98	224.00	20.70	0.50	1.30
90	May 22, 1980	89.00	15.00	3.00	2.70	250.00	29.00	4.00	7.00
91	Oct 04, 1991	58.70	23.30	3.52	0.90	228.00	22.20	0.50	2.60
94	1989	67.00	23.00	19.00	0.90	227.00	31.40	0.10	41.60

Table 15. BEDROCK WATER TYPES GENERATED BY DUROV PROGRAM

SITE #	DOMINANT CATIONS	DOMINANT ANIONS
1	X	HCO ₃
2	X	HCO ₃
3	X	CL
4	X	CL
5	X	HCO ₃
6	Ca	HCO ₃
7	Ca	HCO ₃
8	Ca	HCO ₃
9	Ca	HCO ₃
10	Ca	HCO ₃
11	Ca	HCO ₃
12	X	HCO ₃
13	Ca	HCO ₃
14	Ca	HCO ₃
15	Ca	X
16	Ca	HCO ₃
17	Ca	HCO ₃
19	Ca	HCO ₃
20	Ca	HCO ₃
21	Ca	HCO ₃
22	Ca	HCO ₃
23	Ca	HCO ₃
24	Ca	HCO ₃
25	Ca	HCO ₃
26	Ca	HCO ₃
27	Ca	HCO ₃
28	X	HCO ₃
29	X	HCO ₃
30	X	X
31	X	HCO ₃
32	X	HCO ₃
33	Ca	HCO ₃
34	Ca	HCO ₃
35	Ca	HCO ₃
36	Ca	HCO ₃
41	Ca	HCO ₃
43	Ca	HCO ₃
49	Ca	SO ₄ + NO ₃
53	Ca	SO ₄ + NO ₃
55	Ca	HCO ₃
62	Ca	SO ₄ + NO ₃
63	Ca	X
64	Na + K	CL

X = No Dominant Water Type

Table 15 (Cont'd)

SITE #	DOMINANT CATIONS	DOMINANT ANIONS
65	Ca	HCO ₃
66	Ca	HCO ₃
67	Ca	HCO ₃
68	Ca	SO ₄ + NO ₃
69	Ca	HCO ₃
70	Ca	HCO ₃
71	Ca	HCO ₃
72	Ca	HCO ₃
73	Ca	SO ₄ + NO ₃
75	Ca	HCO ₃
76	Ca	HCO ₃
77	Ca	HCO ₃
78	Ca	HCO ₃
79	Ca	SO ₄ + NO ₃
80	Ca	HCO ₃
87	Ca	HCO ₃
88	X	HCO ₃
89	Ca	HCO ₃
90	Ca	HCO ₃
91	Ca	HCO ₃
92	Ca	HCO ₃

X = No Dominant Water Type

Table 16. OVERBURDEN WATER QUALITY DATA USED IN DUROV PROGRAM

SITE #	DATE SAMPLED	CATIONS				ANIONS			
		Ca (mg/L)	Mg (mg/L)	Na (mg/L)	K (mg/L)	ALKALINITY (mg/L as CaCO ₃)	SO ₄ (mg/L)	NITRATES (mg/L as NO ₃)	Cl (mg/L)
1	Jun 02, 1993	106.10	22.90	16.90	1.58	290.00	37.59	0.40	48.00
2	Jun 02, 1993	106.90	23.10	17.30	1.59	289.80	37.15	0.40	47.70
3	Jun 02, 1993	110.10	28.60	82.20	2.22	331.60	26.29	5.75	140.00
4	Jun 02, 1993	94.70	28.45	79.90	2.18	313.30	26.11	5.95	138.00
5	Jun 02, 1993	80.70	24.10	34.70	2.21	257.40	39.78	1.15	51.60
6	Jun 02, 1993	66.60	23.05	7.60	1.18	229.70	37.67	0.10	9.00
7	Jun 02, 1993	50.20	15.35	13.90	1.20	156.70	18.78	0.45	30.90
8	Jun 02, 1993	48.70	14.15	13.40	1.20	149.90	18.92	0.40	31.30
14	Dec 11, 1989	107.00	25.50	37.50	2.50	307.00	53.00	0.35	80.50
15	Sep 22, 1987	73.00	24.80	21.00	1.20	226.00	58.60	0.96	49.60
17	Oct 05, 1992	84.40	25.40	29.00	1.53	246.40	27.42	4.43	61.80
18	May 03, 1993	73.20	22.26	20.99	1.46	234.50	24.42	4.25	44.00
19	U	46.00	21.00	17.00	2.50	211.00	24.00	0.10	1.50
20	Sep 30, 1993	45.90	22.10	27.10	1.20	214.00	9.40	0.10	16.60
31	May 23, 1980	79.00	17.00	8.00	1.10	241.00	41.00	0.10	3.00
33	May 21, 1981	83.00	13.00	7.00	1.30	221.00	29.00	1.40	16.00
36	Jul 08, 1980	89.00	7.00	18.00	1.00	197.00	25.00	0.80	43.00
41	May 21, 1980	82.00	7.00	115.00	1.10	291.00	33.00	0.90	108.00
46	May 22, 1980	100.00	8.00	8.00	0.80	203.00	25.00	1.90	51.00
50	Jul 04, 1980	110.00	9.00	6.00	0.90	222.00	83.00	0.60	8.00
58	May 23, 1980	81.00	11.00	4.00	6.00	222.00	20.00	4.10	3.00
59	May 23, 1980	83.00	12.00	3.00	0.80	224.00	27.00	1.40	2.00
61	May 23, 1980	122.00	21.00	5.00	2.20	317.00	49.00	1.50	20.00
63	May 23, 1980	64.00	13.00	4.00	1.00	197.00	23.00	0.10	2.00
66	May 15, 1980	87.00	66.00	15.00	3.40	410.00	87.00	0.10	14.00
67	Feb 02, 1984	196.00	22.50	40.00	2.00	234.00	2.50	66.00	58.80
68	May 26, 1980	151.00	19.00	12.00	0.70	307.00	78.00	2.70	52.00
69	Apr 05, 1977	122.00	20.00	5.00	1.00	286.00	54.00	0.10	34.00
70	May 15, 1980	260.00	109.00	360.00	17.00	185.00	680.00	15.00	677.00
71	Jul 07, 1980	155.00	19.00	35.00	2.70	316.00	114.00	3.50	57.00
72	Jan 16, 1984	85.00	65.00	87.00	7.40	155.20	397.90	0.40	74.20
73	Sep 11, 1985	73.00	17.30	9.40	3.00	235.80	29.00	1.35	4.20
74	Jan 25, 1985	112.00	26.00	5.50	1.70	370.60	25.50	0.10	1.40
76	Dec 04, 1984	75.00	25.00	7.50	1.40	262.80	35.00	0.10	4.40
77	May 20, 1980	120.00	7.00	57.00	0.50	258.00	72.00	19.00	24.00
78	Sep 04, 1990	185.30	34.55	274.80	8.54	324.20	42.18	5.40	563.00
79	Nov 06, 1990	115.50	28.10	57.70	4.41	317.00	60.43	4.20	109.00
80	May 26, 1980	118.00	9.00	15.00	0.70	274.00	47.00	2.50	26.00
81	May 18, 1977	138.00	41.00	15.00	2.00	259.00	54.00	0.20	172.00
82	May 16, 1980	110.00	15.00	12.00	2.40	280.00	46.00	3.60	5.00
83	Apr 25, 1978	82.00	30.00	9.00	6.90	297.00	50.00	1.00	8.00
84	May 26, 1980	227.00	41.00	37.00	5.30	417.00	89.00	0.10	219.00
85	May 20, 1980	111.00	7.00	78.00	1.40	254.00	38.00	4.80	114.00
86	May 21, 1980	115.00	16.00	12.00	0.80	296.00	36.00	3.30	24.00

Table 16 (Cont'd)

SITE #	DATE SAMPLED	CATIONS				ANIONS			
		Ca (mg/L)	Mg (mg/L)	Na (mg/L)	K (mg/L)	ALKALINITY (mg/L as CaCO ₃)	SO ₄ (mg/L)	NITRATES (mg/L as NO ₃)	Cl (mg/L)
87	May 21, 1980	59.00	12.00	8.00	0.80	199.00	16.00	0.20	1.00
91	Mar, 1992	114.00	24.20	8.25	2.01	411.00	20.06	1.54	7.42
92	Mar, 1992	144.00	146.00	411.00	132.00	2437.00	2.52	0.10	162.00
93	Dec, 1990	62.10	27.40	15.30	2.92	238.00	35.00	0.29	15.80
95	Jul 15, 1991	81.30	21.80	22.50	1.00	232.00	25.50	1.90	44.70
96	Jul 17, 1991	87.10	24.60	23.90	1.10	261.00	25.20	1.80	45.00
97	May 21, 1980	104.00	34.00	27.00	16.00	294.00	65.00	12.00	51.00
98	Oct 04, 1991	62.00	23.20	3.09	0.90	212.00	21.50	3.90	2.10
99	Oct 04, 1991	86.70	29.70	22.40	1.37	212.00	23.00	11.70	33.60

Table 17. OVERBURDEN WATER TYPES GENERATED BY DUROV PROGRAM

SITE #	DOMINANT CATIONS	DOMINANT ANIONS
1	Ca	HCO3
2	Ca	HCO3
3	X	HCO3
4	X	HCO3
5	Ca	HCO3
6	Ca	HCO3
7	Ca	HCO3
8	Ca	HCO3
14	Ca	HCO3
15	Ca	HCO3
17	Ca	HCO3
18	Ca	HCO3
19	X	HCO3
20	X	HCO3
31	Ca	HCO3
33	Ca	HCO3
36	Ca	HCO3
41	Na + K	HCO3
46	Ca	HCO3
50	Ca	HCO3
58	Ca	HCO3
59	Ca	HCO3
61	Ca	HCO3
63	Ca	HCO3
66	Mg	HCO3
67	Ca	X
68	Ca	HCO3
69	Ca	HCO3
70	X	CL
71	Ca	HCO3
72	X	SO4 + NO3
73	Ca	HCO3
74	Ca	HCO3
76	Ca	HCO3
77	Ca	HCO3
78	Na + K	CL
79	Ca	HCO3
80	Ca	HCO3
81	Ca	X
82	Ca	HCO3
83	Ca	HCO3
84	Ca	HCO3
85	Ca	HCO3

X = No Dominant Water Type

Table 17 (Cont'd)

SITE #	DOMINANT CATIONS	DOMINANT ANIONS
86	Ca	HCO ₃
87	Ca	HCO ₃
91	Ca	HCO ₃
92	Na + K	HCO ₃
93	Ca	HCO ₃
95	Ca	HCO ₃
96	Ca	HCO ₃
97	Ca	HCO ₃
98	Ca	HCO ₃
99	Ca	HCO ₃

X = No Dominant Water Type

Table 18. A SUMMARY OF WATER TYPES ENCOUNTERED IN BEDROCK AND OVERBURDEN WELLS

(Calculated by DUROV Program)

BEDROCK WELLS				
DOMINANT CATIONS	DOMINANT ANIONS	WATER TYPE	# OF WELLS	% OF WELLS
Ca	HCO ₃	Ca / HCO ₃	43	68
X	HCO ₃	HCO ₃	9	14
Ca	SO ₄ + NO ₃	Ca / SO ₄ +NO ₃	6	9
CL	X	Cl	2	3
Ca	X	Ca	2	3
Na + K	CL	Na+K / Cl	1	1.5
X	X	X	1	1.5
			64	100

X = NO DOMINANT TYPE

OVERBURDEN WELLS				
DOMINANT CATIONS	DOMINANT ANIONS	WATER TYPE	# OF WELLS	% OF WELLS
Ca	HCO ₃	Ca / HCO ₃	41	77
X	HCO ₃	HCO ₃	4	8
Ca	X	Ca	2	3.5
Na + K	HCO ₃	Na+K / HCO ₃	2	3.5
Na + K	CL	Na+K / Cl	1	2
X	CL	Cl	1	2
X	SO ₄ + NO ₃	SO ₄ +NO ₃	1	2
Mg	HCO ₃	Mg / HCO ₃	1	2
			53	100

X = NO DOMINANT TYPE

Table 19. A SUMMARY OF DATA AT VARIOUS PROVINCIAL WATER QUALITY MONITORING NETWORK SITES IN THE CREDIT RIVER WATERSHED

PARAMETER: WATER TEMPERATURE

PERIOD: 1990 TO 1993

UNITS = DEGREES C

STATION ID	STA NAME	LOCATION	NOBS	MINIMUM	1ST QUARTILE	MEAN	MEDIAN	3RD QUARTILE	MAXIMUM
019	CREDIT RIVER	SOUTHERN DAM OF ORANGEVILLE RESERVOIR	137	.000	4.000	11.365	10.900	19.000	27.100
006	CREDIT RIVER	HIGHWAY 10 DNSTR.FROM ORANGEVILLE STP	135	.500	4.000	10.159	10.000	16.000	22.000
024	CREDIT RIVER	AT HWY. 10 2ND.BR.BELOW ORANGEVILLE	137	.500	4.000	10.164	10.000	16.000	22.000
023	CREDIT RIVER	AT MELVILLE	138	.500	3.725	10.781	10.750	17.000	30.000
018	CREDIT RIVER	AT 20 SIDE ROAD CALEDON TOWNSHIP	35	.100	3.750	10.849	10.000	17.750	25.000
015	CREDIT RIVER ERIN BR.	AT WELLINGTON AND PEEL COUNTY BOUNDARY	36	.500	3.725	9.875	9.500	16.125	19.500
010	CREDIT RIVER	AT COUNTY ROAD 9 TERRA COTTA	34	.200	3.925	11.212	9.750	18.225	25.000
013	CREDIT RIVER	AT 22ND SIDE ROAD GLEN WILLIAMS	33	.200	6.000	12.027	12.000	19.000	23.000
008	BLACK CREEK	FIRST CONCESSION UPSTREAM FROM LIMEHOUSE	33	.500	5.000	11.142	12.500	17.000	21.000
022	CREDIT RIVER WEST BR.	AT COUNTY ROAD NO. 13 GEORGETOWN	33	.200	3.000	11.227	12.500	18.000	22.500
004	CREDIT RIVER WEST BR.	HIGHWAY 7 NORVAL	35	.200	4.600	11.329	12.500	18.250	21.500
003	CREDIT RIVER	HIGHWAY 7 NORVAL	35	.200	4.700	11.540	11.000	19.000	22.500
017	CREDIT RIVER	AT DERRY ROAD WEST OF HIGHWAY NO 10	34	.100	4.850	11.674	9.500	20.000	25.000
016	FLETCHER'S CREEK	AT STEELS AVE,BRAMPTON	37	.200	6.000	12.881	15.000	19.500	23.000
002	CREDIT RIVER	HIGHWAY 5 ERINDALE	53	.200	2.000	9.602	7.000	17.800	25.300

PARAMETER: CHLORIDE

PERIOD: 1990 TO 1993

UNITS = mg/l

STATION ID	STA NAME	LOCATION	NOBS	MINIMUM	1ST QUARTILE	MEAN	MEDIAN	3RD QUARTILE	MAXIMUM
019	CREDIT RIVER	SOUTHERN DAM OF ORANGEVILLE RESERVOIR	152	18.300	29.375	38.538	31.950	43.975	145.000
006	CREDIT RIVER	HIGHWAY 10 DNSTR.FROM ORANGEVILLE STP	152	19.000	102.750	125.233	117.500	140.000	376.000
024	CREDIT RIVER	AT HWY. 10 2ND.BR.BELOW ORANGEVILLE	154	28.400	87.100	107.708	105.000	120.000	301.000
023	CREDIT RIVER	AT MELVILLE	154	34.900	88.250	106.909	101.500	115.750	334.000
018	CREDIT RIVER	AT 20 SIDE ROAD CALEDON TOWNSHIP	39	22.000	42.300	47.685	47.500	53.400	66.900
015	CREDIT RIVER ERIN BR.	AT WELLINGTON AND PEEL COUNTY BOUNDARY	39	13.700	28.400	30.121	29.700	31.800	57.000
010	CREDIT RIVER	AT COUNTY ROAD 9 TERRA COTTA	39	19.900	34.450	38.897	37.100	39.750	93.000
013	CREDIT RIVER	AT 22ND SIDE ROAD GLEN WILLIAMS	38	20.300	34.475	43.145	36.550	39.350	287.000
008	BLACK CREEK	FIRST CONCESSION UPSTREAM FROM LIMEHOUSE	35	63.400	146.000	193.449	193.000	240.750	315.000
022	CREDIT RIVER WEST BR.	AT COUNTY ROAD NO. 13 GEORGETOWN	38	27.300	61.075	78.063	74.450	95.800	132.000
004	CREDIT RIVER WEST BR.	HIGHWAY 7 NORVAL	37	36.700	80.600	122.192	111.000	160.000	283.000
003	CREDIT RIVER	HIGHWAY 7 NORVAL	38	25.200	49.200	59.397	53.650	61.675	260.000
017	CREDIT RIVER	AT DERRY ROAD WEST OF HIGHWAY NO 10	37	26.900	47.200	63.859	52.600	59.300	425.000
016	FLETCHER'S CREEK	AT STEELS AVE,BRAMPTON	40	27.300	96.500	282.390	150.000	251.000	2,600.000
002	CREDIT RIVER	HIGHWAY 5 ERINDALE	54	29.400	57.200	84.450	65.600	79.550	350.000

Table 19 (cont'd)

PARAMETER: TOTAL NITRATES
PERIOD: 1990 TO 1993
UNITS = mg/l

STATION ID	STA_NAME	LOCATION	NOBS.	MINIMUM	1ST QUARTILE	MEAN	MEDIAN	3RD QUARTILE	MAXIMUM
008	BLACK CREEK	FIRST CONCESSION UPSTREAM FROM LIMEHOUSE	36	1.160	2.923	4.559	4.110	6.372	8.800
002	CREDIT RIVER	HIGHWAY 5 ERINDALE	54	.115	1.310	1.641	1.640	1.930	2.550
003	CREDIT RIVER	HIGHWAY 7 NORVAL	38	.460	1.225	1.545	1.465	1.942	2.590
006	CREDIT RIVER	HIGHWAY 10 DNSTR.FROM ORANGEVILLE STP	152	.020	1.233	1.777	1.730	2.315	3.690
010	CREDIT RIVER	AT COUNTY ROAD 9 TERRA COTTA	6	.445	.670	.838	.887	1.045	1.110
013	CREDIT RIVER	AT 22ND SIDE ROAD GLEN WILLIAMS	38	.425	.561	1.057	.757	1.178	7.440
017	CREDIT RIVER	AT DERRY ROAD WEST OF HIGHWAY NO 10	37	.625	.970	1.341	1.180	1.690	2.690
018	CREDIT RIVER	AT 20 SIDE ROAD CALEDON TOWNSHIP	39	.345	.645	.982	.785	1.230	2.210
019	CREDIT RIVER	SOUTHERN DAM OF ORANGEVILLE RESERVOIR	152	.005	.059	.283	.138	.410	5.410
023	CREDIT RIVER	AT MELVILLE	154	.305	.969	1.475	1.250	1.947	3.630
024	CREDIT RIVER	AT HWY. 10 2ND.BR.BELOW ORANGEVILLE	154	.275	1.112	1.604	1.535	2.033	3.790
004	CREDIT RIVER WEST BR.	HIGHWAY 7 NORVAL	38	1.210	2.783	4.297	4.190	5.863	8.950
022	CREDIT RIVER WEST BR.	AT COUNTY ROAD NO. 13 GEORGETOWN	38	.675	1.400	1.879	1.800	2.255	4.070
016	FLETCHER'S CREEK	AT STEELS AVE,BRAMPTON	40	.315	1.016	1.597	1.240	2.025	4.160

PARAMETER: TOTAL PHOSPHORUS
PERIOD: 1990 TO 1993
UNITS = mg/l

STATION NUMBER	STA_NAME	LOCATION	NOBS.	MINIMUM	1ST QUARTILE	MEAN	MEDIAN	3RD QUARTILE	MAXIMUM	% OBS. ABOVE PM00/G
019	CREDIT RIVER	SOUTHERN DAM OF ORANGEVILLE RESERVOIR	150	.004	.018	.035	.024	.031	.330	25.3
006	CREDIT RIVER	HIGHWAY 10 DNSTR.FROM ORANGEVILLE STP	150	.009	.049	.122	.060	.085	2.500	96.0
024	CREDIT RIVER	AT HWY. 10 2ND.BR.BELOW ORANGEVILLE	154	.007	.039	.079	.047	.068	1.950	90.1
023	CREDIT RIVER	AT MELVILLE	152	.007	.039	.140	.048	.072	5.800	86.8
018	CREDIT RIVER	AT 20 SIDE ROAD CALEDON TOWNSHIP	39	.006	.018	.028	.023	.035	.065	33.3
015	CREDIT RIVER ERIN BR.	AT WELLINGTON AND PEEL COUNTY BOUNDARY	39	.002	.010	.017	.015	.019	.075	7.7
010	CREDIT RIVER	AT COUNTY ROAD 9 TERRA COTTA	39	.006	.012	.026	.020	.036	.097	30.8
013	CREDIT RIVER	AT 22ND SIDE ROAD GLEN WILLIAMS	37	.005	.011	.029	.018	.034	.172	30.6
008	BLACK CREEK	FIRST CONCESSION UPSTREAM FROM LIMEHOUSE	36	.026	.048	.073	.055	.077	.420	97.2
004	CREDIT RIVER WEST BR.	HIGHWAY 7 NORVAL	38	.010	.020	.065	.029	.057	.560	47.4
022	CREDIT RIVER WEST BR.	AT COUNTY ROAD NO. 13 GEORGETOWN	38	.004	.009	.019	.014	.019	.086	13.5
003	CREDIT RIVER	HIGHWAY 7 NORVAL	38	.008	.015	.047	.023	.051	.353	42.1
017	CREDIT RIVER	AT DERRY ROAD WEST OF HIGHWAY NO 10	37	.003	.015	.043	.021	.046	.188	40.5
016	FLETCHER'S CREEK	AT STEELS AVE,BRAMPTON	40	.009	.037	.072	.053	.083	.343	80.0
002	CREDIT RIVER	HIGHWAY 5 ERINDALE	54	.009	.019	.089	.030	.067	1.100	44.4

APPENDICES

APPENDIX I

A SUMMARY OF CHARACTERISTICS

OF

MUNICIPAL WELLS DRILLED IN BEDROCK

Municipality		Region of Peel
Township		Caledon
Concession		HSE 1
Lot		15
Well #		MOEE # 3315 (Village of Caledon)
Easting		580700
Northing		4856610
Elevation (m)		421.2
Date Drilled		September 1969
Depth Water Found (m)		6.7, 15.2
Static Water Level (m)		6.7
Pump Level (m)		9.1
Pump Testing Rate (l/min)		41
Testing Time (hrs)		5
Kind Of Water		Fresh
Water Use		Municipal
Casing Diameter (mm)		100
Lithology (depths in metres)		Brown Gravel with Clay and Stones to 6.1, White Limestone to 15.2
Aquifer		Bedrock, AMABEL Formation ?

Municipality		Region of Peel
Township		Caledon
Concession		HSE 1
Lot		16
Well #		MOEE # 3967 (Village of Caledon)
Easting		580600
Northing		4857075
Elevation (m)		427.3
Date Drilled		July 1972
Depth Water Found (m)		6.1, 15.2
Static Water Level (m)		3
Pump Level (m)		3.6
Pump Testing Rate (l/min)		91
Testing Time (hrs)		2
Kind Of Water		Fresh
Water Use		Municipal
Casing Diameter (mm)		200
Lithology (depths in metres)		Brown Gravel and Sand to 3.9, Brown Clay to 7.9, Blue Limestone to 18.8
Aquifer		Bedrock, AMABEL Formation ?

Municipality		Region of Peel
Township		Caledon
Concession		HSE 1
Lot		16
Well #		MOE # 2918 (Village of Caledon)
Easting		580870
Northing		4857130
Elevation (m)		431.8
Date Drilled		May 1968
Depth Water Found (m)		19.7
Static Water Level (m)		9.7
Pump Level (m)		15.2
Pump Testing Rate (l/min)		41
Testing Time (hrs)		2
Kind Of Water		Fresh
Water Use		Municipal
Casing Diameter (mm)		175
Lithology (depths in metres)		Brown Clay to 1.5, Brown Clay and Gravel to 7.0, Brown Limestone to 21.8, Blue Clay (Shale ?) to 22.7
Aquifer		Bedrock, AMABEL Formation ?

Municipality		Region of Peel
Township		Caledon
Concession		HSW 1
Lot		17
Well #		MOEE # 4996 (Village of Caledon Area)
Easting		579900
Northing		4856850
Elevation (m)		431.8
Date Drilled		September 1976
Depth Water Found (m)		3.9
Static Water Level (m)		Unknown
Pump Level (m)		21.2
Pump Testing Rate (l/min)		36.4
Testing Time (hrs)		
Kind Of Water		Fresh
Water Use		Municipal
Casing Diameter (mm)		200
Lithology (depths in metres)		Brown Clay and Stones to 2.4, Limestone to 16.7, Blue Shale to 23.6, Red Shale to 24.6
Aquifer		Bedrock, AMABEL Formation

Municipality	Wellington County
Township	Erin
Concession	4
Lot	1
Well #	MOEE # 624
Easting	577000
Northing	4835020
Elevation (m)	351.2
Date Drilled	November 1956
Depth Water Found (m)	Unknown
Static Water Level (m)	1.8
Pump Level (m)	Unknown
Pump Testing Rate (l/min)	2895.5
Testing Time (hrs)	33
Kind Of Water	Unknown
Water Use	Municipal
Casing Diameter (mm)	250
Lithology (depths in metres)	Clay and Gravel to 3.3, Clay to 5.5, Gravel and Clay to 6.4, Brown Limestone to 18.8, Grey Limestone and Shale to 21.8, Grey Shale to 25.2, Grey Limestone to 53.3
Aquifer	Bedrock, AMABEL Formation

Municipality	Wellington County
Township	Erin
Concession	7
Lot	20
Well #	MOEE # 4910
Easting	570854
Northing	4846702
Elevation (m)	433.3
Date Drilled	August 1973
Depth Water Found (m)	48.5, 57.6
Static Water Level (m)	19.4
Pump Level (m)	20.6
Pump Testing Rate (l/min)	68.2
Testing Time (hrs)	1
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	Unknown
Lithology (depths in metres)	Gravel to 6.1, Sand and Clay to 19.7, Brown Rock to 43.9, Grey Limestone to 58.8
Aquifer	Bedrock, AMABEL Formation

Municipality	Wellington County
Township	Erin (Village of Erin)
Concession	9
Lot	16
Well #	MOEE # 5931
Easting	574500
Northing	4846700
Elevation (m)	393.9
Date Drilled	October 1975
Depth Water Found (m)	7.6
Static Water Level (m)	1.3
Pump Level (m)	7.6
Pump Testing Rate (l/min)	272.7
Testing Time (hrs)	4
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	125
Screen Depth (m)	7.6
Screen Length (m)	1.5
Lithology (depths in metres)	Fill and Topsoil to 0.9, Sand to 4.6, Gravel with Sand and Clay to 7.3, Grey Limestone to 15.8
Aquifer	Bedrock, AMABEL Formation

Municipality	Wellington County
Township	Erin (Village of Erin)
Concession	9
Lot	16
Well #	MOEE # 5932
Easting	574510
Northing	4846700
Elevation (m)	393.9
Date Drilled	June 1975
Depth Water Found (m)	6.7, 33.3
Static Water Level (m)	1.2
Pump Level (m)	6.7
Pump Testing Rate (l/min)	272.7
Testing Time (hrs)	1
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	125
Lithology (depths in metres)	Fill and Topsoil to 1.2, Sand to 4.9, Gravel and Clay to 6.1, Sand with Stones and Gravel to 7.6, Coarse Gravel to 8.8, Gravel and Sand to 9.1, Grey Limestone to 40.3, Blue Shale to 40.6
Aquifer	Bedrock, AMABEL Formation

Municipality	Wellington County
Township	Erin (Village of Erin)
Concession	10
Lot	17
Well #	MOEE # 7287
Easting	574250
Northing	4847750
Elevation (m)	393.9
Date Drilled	May 1980
Depth Water Found (m)	7.6, 20.6, 26.4
Static Water Level (m)	Flowing
Pump Level (m)	Unknown
Pump Testing Rate (l/min)	1363.6
Testing Time (hrs)	42
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	200
Lithology (depths in metres)	Brown Clay and Stones to 3.0, Brown Clay with Sand and Gravel to 4.6, Brown Stones and Medium Gravel to 7.0, Grey Stones and Medium Gravel to 14.6, Brown Stones to 17.6, Grey Stones to 20.6, Brown Stones to 26.1, Limestone to 28.8, Grey Stones to 37.6 ?
Aquifer	Bedrock, AMABEL Formation

Municipality	Wellington County
Township	Erin (Village of Erin)
Concession	Unknown
Lot	Unknown
Well #	MOEE # 834
Easting	575044
Northing	4847329
Elevation (m)	392.4
Date Drilled	May 1955
Depth Water Found (m)	13.6
Static Water Level (m)	3.0
Pump Level (m)	6.7
Pump Testing Rate (l/min)	27.3
Testing Time (hrs)	6
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	250
Lithology (depths in metres)	Medium Sand to 7.6, Gravel to 8.5, Blue Limestone to 20.0
Aquifer	Bedrock, AMABEL Formation

Municipality	Wellington County
Township	Erin (Village of Erin)
Concession	Unknown
Lot	Unknown
Well #	MOEE # 833
Easting	575432
Northing	4846455
Elevation (m)	387.9
Date Drilled	September 1954
Depth Water Found (m)	13.6
Static Water Level (m)	3.0
Pump Level (m)	6.7
Pump Testing Rate (l/min)	27.3
Testing Time (hrs)	12
Kind Of Water	Mineral
Water Use	Municipal
Casing Diameter (mm)	250
Lithology (depths in metres)	Medium Sand to 7.6, Gravel to 8.5, Blue Limestone to 18.8
Aquifer	Bedrock, AMABEL Formation

Municipality	Wellington County
Township	Erin
Concession	9
Lot	17
Well #	Village of Erin Production Well # 7
Easting	573357
Northing	4847185
Elevation (m)	Unknown
Date Drilled	January 23, 1986
Depth Water Found (m)	4.57
Static Water Level (m)	Flowing
Pump Level (m)	Unknown
Pump Testing Rate (l/min)	1363
Testing Time (hrs)	24
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	305
Lithology (depths in metres)	Fill to 0.91, Muck to 1.22, Sand and Gravel to 6.10, Silt to 7.01, Silty Gravel to 10.67, Alternate Beds of Brown and Grey Limestone to 43.0
Aquifer	Bedrock, AMABEL Formation
Transmissivity (m ² /day)	40 to 70
Storage Coefficient	Unknown
Specific Capacity (L/min/m)	Unknown

Municipality	Wellington County
Township	Erin
Concession	9
Lot	17
Well #	Village of Erin Production Well # 8
Easting	573315
Northing	4846623
Elevation (m)	Unknown
Date Drilled	December 20, 1991
Depth Water Found (m)	9.75 to 15.55, 18.90 to 46.04
Static Water Level (m)	6.44 above ground surface (Flowing)
Pump Level (m)	16.77
Pump Testing Rate (l/min)	2620
Testing Time (hrs)	48
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	355.6, 203.2
Lithology (depths in metres)	Brown Sandy Clay to 3.05, Brown Sandy Gravel to 4.27, Brown Clay with Gravel to 6.71, Alternate Beds of Brown and Grey Limestone to 46.04
Aquifer	Bedrock, AMABEL Formation
Transmissivity (m ² /day)	Local Transmissivity = 380, Regional Aquifer Transmissivity = 460 to 740
Storage Coefficient	.0001
Specific Capacity (L/min/m)	Unknown

Municipality	Region of Huron
Township	Huron Hills (Terra Cotta Area)
Concession	11
Lot	30
Well #	MOEE # 1650
Easting	583564
Northing	4840984
Elevation (m)	318.2
Date Drilled	June 1962
Depth Water Found (m)	13.6
Static Water Level (m)	8.5
Pump Level (m)	8.5
Pump Testing Rate (l/min)	22.7
Testing Time (hrs)	4
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	125
Lithology (depths in metres)	Stones and Clay to 5.5, Red Shale to 23.6
Aquifer	Bedrock, Queenston Formation ?

Municipality	Region of Halton	
Township	Halton Hills (Town of Acton)	
Concession	3	
Lot	29	
Well #	MOEE # 865	
Easting	576681	
Northing	4831681	
Elevation (m)	357.6	
Date Drilled	September 1954	
Depth Water Found (m)	8.5	
Static Water Level (m)	3.6	
Pump Level (m)	8.5	
Pump Testing Rate (l/min)	213.6	
Testing Time (hrs)	8	
Kind Of Water	Fresh	
Water Use	Municipal	
Casing Diameter (mm)	250	
Lithology (depths in metres)	Red Clay to 7.0, Gravel to 7.3, White Limestone to 8.5, Blue Limestone to 13.3, Blue Shale to 13.6	
Aquifer	Bedrock, AMABEL Formation	

Municipality	Region of Halton	
Township	Halton Hills (Town of Acton)	
Concession	3	
Lot	30	
Well #	MOEE # 867	
Easting	576662	
Northing	4831701	
Elevation (m)	358.5	
Date Drilled	August 1950	
Depth Water Found (m)	12.1	
Static Water Level (m)	6.1	
Pump Level (m)	27.3	
Pump Testing Rate (l/min)	681.8	
Testing Time (hrs)	8	
Kind Of Water	Fresh	
Water Use	Municipal	
Casing Diameter (mm)	200	
Lithology (depths in metres)	Black Topsoil to 1.2, White Limestone to 15.8, Blue Limestone to 19.1, Blue Shale to 29.1	
Aquifer	Bedrock, AMABEL Formation	
Specific Capacity (L/min/m)	150	

Municipality	Region of Halton
Township	Halton Hills (Town of Acton)
Concession	3
Lot	31
Well #	MOE # 869, Town of Acton, Davidson # 1 Production Well
Easting	576855
Northing	4833065
Elevation (m)	368.38
Date Drilled	March 1957
Depth Water Found (m)	Unknown
Static Water Level (m)	1.52
Pump Level (m)	3.66
Pump Testing Rate (l/min)	2007
Testing Time (hrs)	32
Kind Of Water	Unknown
Water Use	Municipal
Casing Diameter (mm)	254
Lithology (depths in metres)	Loam to 0.30, Clay with Medium Sand and Boulders to 3.05, Brown Limestone to 14.02
Aquifer	Bedrock, AMABEL Formation
Transmissivity (m ² /day)	Reference for following data: Draft Report, Groundwater Survey Town of Halton Hills – Acton, The Regional Municipality of Halton, International Water Consultants Ltd. Aquifer T = 1153 – 1460
Storage Coefficient	.001 to 0.1
Specific Capacity (l/min/meter)	Unknown

Municipality	Dufferin County
Township	East Garafraxa
Concession	C
Lot	4
Well #	MOE # 121 (Orangeville Area)
Easting	570133
Northing	4862313
Elevation (m)	454.6
Date Drilled	May 1959
Depth Water Found (m)	12.7
Static Water Level (m)	Flowing
Pump Level (m)	10.9
Pump Testing Rate (l/min)	690.9
Testing Time (hrs)	24
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	250
Lithology (depths in metres)	Black Muck to 2.7, Gravel to 3.6, Clay and Medium Sand to 10.0, Medium Sand and Silt to 12.4, Boulders to 12.7, Brown Limestone to 16.7, Blue Limestone to 23.0, Brown Limestone to 34.9, Brown Limestone and Shale to 48.5
Aquifer	Bedrock, AMABEL Formation

Municipality	Dufferin County
Township	Mono
Concession	WHS 2
Lot	5
Well #	Brett Farm Subdv. Production Well (Orangeville Area)
Easting	571625
Northing	4866140
Elevation (m)	445
Date Drilled	January 23, 1990
Depth Water Found (m)	24.0 – 29.0
Static Water Level (m)	15.2
Pump Level (m)	21.2
Pump Testing Rate (l/min)	455
Testing Time (hrs)	24
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	200
Lithology (depths in metres)	Brown Sand to 15.24, Brown Rock to 65.8, Red Shale to 67.0
Aquifer	Bedrock, AMABEL Formation
Transmissivity (m ² /day)	150
Storage Coefficient	0.0003
Specific Capacity (L/min/meter)	135

Municipality	Dufferin County
Township	Mono
Concession	HS W 2
Lot	6
Well #	Cardinal Woods Subdv. Well# 1 (Orangeville Area)
Easting	571280
Northing	4865910
Elevation (m)	450
Date Drilled	1978
Depth Water Found (m)	36.89
Static Water Level (m)	15.44
Pump Level (m)	20.16
Pump Testing Rate (l/min)	341
Testing Time (hrs)	25
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	Unknown
Lithology (depths in metres)	Brown Clay with Stones to 2.44, Brown Sand with Gravel and Stones to 5.79, Brown Clay with Sand and Stones to 15.85, Brown sand with Stones to 22.56, Grey Sand with Stones to 26.22, Light Brown Limestone to 34.76, Light Grey Limestone to 36.89, Light Brown Limestone to 37.20, Blue Shale to 47.56
Aquifer	Bedrock Formation ? (most likely AMABEL)
Transmissivity (m ² /day)	53
Storage Coefficient	Unknown
Specific Capacity (L/min/meter)	72

Municipality	Dufferin County
Township	Mono
Concession	HS W.2
Lot	6
Well #	Cardinal Woods Subdv. Well# 2 (Orangeville Area)
Easting	571425
Northing	4866190
Elevation (m)	450
Date Drilled	May 1988
Depth Water Found (m)	
Static Water Level (m)	4.65
Pump Level (m)	16.90
Pump Testing Rate (l/min)	568
Testing Time (hrs)	25
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	152.5
Lithology (depths in metres)	Unknown
Aquifer	Bedrock Formation ? (most likely AMABEL)
Transmissivity (m ² /day)	34
Storage Coefficient	Unknown
Specific Capacity (L/min/metre)	46

Municipality	Dufferin County
Township	Mono
Concession	HS W.3
Lot	3
Well #	Orangeville Well 8A (Dudgeon Well # 1)
Easting	570813
Northing	4863958
Elevation (m)	444
Date Drilled	Unknown
Depth Water Found (m)	32, 35, 37, 45, 69
Static Water Level (m)	1.24 above ground level (Flowing)
Pump Level (m)	9.20
Pump Testing Rate (l/min)	see test results below
Testing Time (hrs)	see test results below
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	203.2
Lithology (depths in metres)	Black Muck to 0.61, Clay Sand and Stones to 11.58, Limestone to 46.33, Alternate Blue/Red Shales to 75.29, Queenston Shale to 76.2
Aquifer	Bedrock Formation ? (most likely AMABEL)
Transmissivity (m ² /day)	A well field pump test (3 wells) when all wells were pumped at 705 L/min. for 96.7 hours indicated a Transmissivity of 43.0
Storage Coefficient	Unknown
Specific Capacity (L/min/meter)	A pump test at 705 L/min. for 8.33 hours indicated a Specific Capacity of 207 L/min/metre
	A well field pump test (3 wells) when all wells were pumped at 705 L/min. for 96.7 hours indicated a Specific Capacity of 67.5 L/min/metre

Municipality	Dufferin County
Township	Mono
Concession	HS W 3
Lot	3
Well #	Orangeville Well 8B (Dudgeon Well # 2)
Easting	570800
Northing	4864013
Elevation (m)	444
Date Drilled	Unknown
Depth Water Found (m)	13, 27, 28, 36, 63
Static Water Level (m)	3.10 above ground level (Flowing)
Pump Level (m)	7.10
Pump Testing Rate (l/min)	see test results below
Testing Time (hrs)	see test results below
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	209.6
Lithology (depths in metres)	Fill to 1.22, Silty Clay and Stones to 10.97, Grey Limestone to 25.6, Brown Limestone to 44.2, Alternate Blue Red Shales to 70.71, Flint or Chert to 71.02, Red and Blue Shale to 78.03, Red Queenston Shale to 79.25
Aquifer	Bedrock Formation ? (most likely AMABEL)
Transmissivity (m ² /day)	A well field pump test (3 wells) when all wells were pumped at 705 L/min. for 96.7 hours indicated a Transmissivity of 43.0
Storage Coefficient	Unknown
Specific Capacity (L/min/meter)	A pump test at 705 L/min. for 8.33 hours indicated a Specific Capacity of 235 L/min/metre
	A well field pump test (3 wells) when all wells were pumped at 705 L/min. for 96.7 hours indicated a Specific Capacity of 69.1 L/min/metre

Municipality	Dufferin County
Township	Mono
Concession	HS W 3
Lot	3
Well #	Orangeville Well 8C (Dudgeon Well # 3)
Easting	570740
Northing	4864046
Elevation (m)	444
Date Drilled	Unknown
Depth Water Found (m)	13, 32, 35, 37, 45, 69
Static Water Level (m)	0.51 below ground level
Pump Level (m)	9.60
Pump Testing Rate (l/min)	see test results below
Testing Time (hrs)	see test results below
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	203.2
Lithology (depths in metres)	Black Muck to 0.61, Clay Sand and Stones to 11.58, Limestone to 46.33, Alternate Blue/Red Shales to 75.29, Queenston Shale to 76.2
Aquifer	Bedrock Formation ? (most likely AMABEL)
Transmissivity (m ² /day)	A well field pump test (3 wells) when all wells were pumped at 705 L/min. for 96.7 hours indicated a Transmissivity of 46.0
Storage Coefficient	Unknown
Specific Capacity (L/min/meter)	A pump test at 705 L/min. for 8.33 hours indicated a Specific Capacity of 243 L/min/metre
	A well field pump test (3 wells) when all wells were pumped at 705 L/min. for 96.7 hours indicated a Specific Capacity of 77.6 L/min/metre

Municipality	Dufferin County
Township	East Garafraxa
Concession	C
Lot	4
Well #	Orangeville Well # 9 (Montgomery Well # 1)
Easting	569890
Northing	4861900
Elevation (m)	Unknown
Date Drilled	June 15, 1988
Depth Water Found (m)	14.33
Static Water Level (m)	3.81
Pump Level (m)	8.91
Pump Testing Rate (l/min)	see test results below
Testing Time (hrs)	see test results below
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	209.6
Lithology (depths in metres)	Brown Sandy Clay to 11.58, Brown Limestone (Dolomite) to 21.64
Aquifer	Bedrock, AMABEL Formation
Transmissivity (m ² /day)	A well field pump test (3 wells) when all wells were pumped at 1277 L/min. for 96.7 hours indicated a Transmissivity of 181.0
Storage Coefficient	Unknown
Specific Capacity (L/min/meter)	A pump test at 823 L/min. for 8.33 hours indicated a Specific Capacity of 604 L/min/metre
	A well field pump test (3 wells) when all wells were pumped at 1277 L/min. for 96.7 hours indicated a Specific Capacity of 181 L/min/metre

Municipality	Dufferin County
Township	Mono
Concession	HSE 1
Lot	1
Well #	Purple Hill Subdv. Production Well 2 (Orangeville Area)
Easting	574600
Northing	4864070
Elevation (m)	Unknown
Date Drilled	1977
Depth Water Found (m)	19.2
Static Water Level (m)	11.28
Pump Level (m)	20.10
Pump Testing Rate (l/min)	see test results below
Testing Time (hrs)	see test results below
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	152.4
Lithology (depths in metres)	Brown Clay with Stones to 1.52, Brown Rock to 17.68, Dark Brown Rock to 19.21, Dark Grey Rock to 21.34, Blue Shale to 23.17, Red Shale to 27.44
Aquifer	Bedrock Formation ?
Transmissivity (m ² /day)	Unknown
Storage Coefficient	Unknown
Specific Capacity (L/min/meter)	Original Test Well Step Test at 40, 72, 97 L/min for 20 min. intervals indicated specific capacities of 24, 23, and 17 L/min/metre
	After Reconstruction, a Step Test at 45, 72, 97 L/min. for 30 min. intervals indicated Specific Capacities of 19, 18, and 12 L/min/metre
	After further development a Step Test at 45, 72, 97 L/min for 30 min. intervals indicated specific capacities of 29 and 22 L/min/metre

Municipality	Dufferin County
Township	Mono
Concession	HSE 1
Lot	1
Well #	Purple Hill Subdv. Production Well # 3 (Orangeville Area)
Easting	574560
Northing	4864015
Elevation (m)	Unknown
Date Drilled	April 27, 1989
Depth Water Found (m)	19.82
Static Water Level (m)	16.32
Pump Level (m)	20.10
Pump Testing Rate (l/min)	see test results below
Testing Time (hrs)	see test results below
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	254
Lithology (depths in metres)	Brown Clay with Stones to 1.83, Brown Limestone to 3.05, Grey Limestone to 23.17, Brown Limestone to 25.00
Aquifer	Bedrock Formation ?
Transmissivity (m ² /2day)	Unknown
Storage Coefficient	Unknown
Specific Capacity (L/min/metre)	Original Test Well Step Test at 45, 68, 91, 136 L/min for 20 min. intervals indicated specific capacities of 60, 55, 49 and 45 L/min/metre
	After Reconstruction, a Step Test at 45 L/min. for 30 min. and 68 L/min. for 7 min. . The Specific Capacity at 45 L/min. was 13 L/min/metre

Municipality	Dufferin County
Township	Mono
Concession	HSE 1
Lot	1
Well #	Purple Hill Subdv. Production Well # 4 (Orangeville Area)
Easting	574480
Northing	4864090
Elevation (m)	Unknown
Date Drilled	April 19, 1989
Depth Water Found (m)	6.10 to 24.70
Static Water Level (m)	13.96
Pump Level (m)	23.5
Pump Testing Rate (l/min)	see test results below
Testing Time (hrs)	see test results below
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	254, 152.4
Lithology (depths in metres)	Brown Clay with Stones to 2.74, Brown Limestone to 5.79, Brown Shale to 6.10, Light Grey Limestone to 10.98, Brown Shale to 11.59, Brown Limestone to 23.48, Grey Limestone to 25.61
Aquifer	Bedrock Formation ?
Transmissivity (m ² /2day)	Unknown
Storage Coefficient	Unknown
Specific Capacity (L/min/metre)	After Reconstruction, a Step Test at 91, 113, 136, and 159 L/min. for 30 min. intervals, and at 182 L/min. for 60 minutes indicated that Specific Capacities were 38, 36, 34, 31, and 28 L/min/metre.

Municipality	Dufferin County
Township	Mono
Concession	HSE 1
Lot	1
Well #	Purple Hill Subdv. Production Well # 5 (Orangeville Area)
Easting	574350
Northing	4864130
Elevation (m)	Unknown
Date Drilled	May 09, 1989
Depth Water Found (m)	6.10 to 24.39
Static Water Level (m)	13.74
Pump Level (m)	24.00
Pump Testing Rate (l/min)	see test results below
Testing Time (hrs)	see test results below
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	254, 152.4
Lithology (depths in metres)	Brown Clay with Stones to 2.13, Brown Limestone to 21.34, Grey Limestone to 24.39
Aquifer	Bedrock Formation ?
Transmissivity (m ² /day)	Unknown
Storage Coefficient	Unknown
Specific Capacity (l/min/meter)	Original Test Well Step Test at 23, 45, 68, and 91 L/min for 30 min. intervals indicated specific capacities ranging from 50 to 69 L/min/metre
	After Reconstruction, a Step Test at 45 and 68 L/min. for 30 min. intervals
	The Specific Capacity at 45 L/min. was 8 L/min/meter

APPENDIX II

A SUMMARY OF CHARACTERISTICS

OF

WELLS DRILLED IN OVERBURDEN

Municipality	Region of Halton
Township	Halton Hills (Town of Acton)
Concession	Unknown
Lot	Unknown
Well #	MOEE # 4550
Easting	576700
Northing	4830692
Elevation (m)	348.5
Date Drilled	April 1973
Depth Water Found (m)	7.0
Static Water Level (m)	Unknown
Pump Level (m)	Unknown
Pump Testing Rate (l/min)	Unknown
Testing Time (hrs)	Unknown
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	125
Screen Depth (m)	15.2
Screen Length (m)	9.1
Lithology (depths in metres)	Red Sand to 7.0, Coarse Sand to 8.8, Sand and Gravel to 19.7, Medium Sand to 27.0, Sand to 28.8, Sand and Silt to 37.0, Shale to 47.0
Aquifer	Overburden, Ice Contact Drift

Municipality	Region of Halton
Township	Halton Hills (Town of Acton)
Concession	Unknown
Lot	Unknown
Well #	MOEE # 4557
Easting	576710
Northing	4830678
Elevation (m)	348.5
Date Drilled	December 1973
Depth Water Found (m)	5.5
Static Water Level (m)	0.9
Pump Level (m)	3.9
Pump Testing Rate (l/min)	4091
Testing Time (hrs)	5
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	500
Screen Depth (m)	17.6
Screen Length (m)	6.1
Lithology (depths in metres)	Red Sand to 2.7, Sand and Gravel to 8.8, Medium Sand and Silt to 10.6, Sand and Gravel to 11.8, Gravel with Silt and Sand to 17.5, Coarse Sand to 23.6
Aquifer	Overburden, Fairy Lake Aquifer (Ref. Groundwater Survey, Town of Acton)
Estimated Thickness (m)	Ice Contact Drift Deposit 7.9

Municipality	Region of Halton
Township	Halton Hills (Town of Acton)
Concession	Unknown
Lot	Unknown
Well #	MOEE # 4551
Easting	576714
Northing	4830700
Elevation (m)	348.5
Date Drilled	April 1973
Depth Water Found (m)	8.2
Static Water Level (m)	Unknown
Pump Level (m)	Unknown
Pump Testing Rate (l/min)	Unknown
Testing Time (hrs)	Unknown
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	Unknown
Screen Depth (m)	11.5
Screen Length (m)	12.1
Lithology (depths in metres)	Red Sand to 2.4, Sand and Gravel to 8.2, Medium Sand and Silt to 10.6, Gravel and Sand to 11.8, Gravel with silt and Sand to 15.2, Coarse Sand to 23.6, Coarse Sand with Silt and Clay to 25.8
Aquifer	Overburden, Fair Lake Aquifer (Ref. Groundwater Survey, Town of Acton)
	Ice Contact Drift Deposit
Estimated Thickness (m)	7.6

Municipality	Region of Halton
Township	Halton Hills (Town of Acton)
Concession	Unknown
Lot	Unknown
Well #	MOEE # 4553
Easting	576712
Northing	4830698
Elevation (m)	348.5
Date Drilled	December 1973
Depth Water Found (m)	5.5
Static Water Level (m)	2.4
Pump Level (m)	3.6
Pump Testing Rate (l/min)	981.8
Testing Time (hrs)	99.98
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	Unknown
Screen Depth (m)	5.5
Screen Length (m)	18.2
Lithology (depths in metres)	Red Sand to 2.7, Fine Sand and Gravel to 8.8, Medium Sand and Silt to 10.6, Gravel with Silt and Sand to 17.6, Coarse Sand to 23.6, Coarse Sand and Clay to 33.3
Aquifer	Overburden, Fair Lake Aquifer (Ref. Groundwater Survey, Town of Acton)
	Ice Contact Drift Deposit
Estimated Thickness (m)	8.5
Specific Capacity (l/min/m)	54

Municipality	Region of Hakon
Township	Hakon Hills (Town of Acton)
Concession	Unknown
Lot	Unknown
Well #	MOEE # 4556
Easting	576855
Northing	4830759
Elevation (m)	348.5
Date Drilled	April 1973
Depth Water Found (m)	3.3
Static Water Level (m)	Unknown
Pump Level (m)	Unknown
Pump Testing Rate (l/min)	Unknown
Testing Time (hrs)	Unknown
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	Unknown
Screen Depth (m)	3.3
Screen Length (m)	12.1
Lithology (depths in metres)	Red Sand to 4.2, Gravel and Sand to 8.8, Gravel to 11.8, Fine Sand to 15.5, Clay to 15.8
Aquifer	Overburden, Ice Contact Drift Deposit

Municipality	Region of Hakon
Township	Town of Georgetown
Concession	Unknown
Lot	Unknown
Well #	MOEE # 3109
Easting	586150
Northing	4832900
Elevation (m)	262.1
Date Drilled	April 1969
Depth Water Found (m)	0.6
Static Water Level (m)	Flowing
Pump Level (m)	1.2
Pump Testing Rate (l/min)	3272.7
Testing Time (hrs)	20
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	300
Screen Depth (m)	23.0
Screen Length (m)	11.2
Lithology (depths in metres)	Black Muck to 0.6, Medium Sand and Silt to 3.0, Medium Sand and Clay to 10.6, Medium Sand to 16.6, Medium Sand with Gravel and Silt to 33.3, Red Clay to 33.6
Aquifer	Overburden, Melwater Channel Deposit

Municipality	Region of Hakon
Township	Town of Georgetown
Concession	Unknown
Lot	Unknown
Well #	MOEE # 1660
Easting	587340
Northing	4832735
Elevation (m)	231.8
Date Drilled	November 1954
Depth Water Found (m)	19.7
Static Water Level (m)	1.2
Pump Level (m)	Unknown
Pump Testing Rate (l/min)	2727.3
Testing Time (hrs)	Unknown
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	500
Screen Depth (m)	19.7
Screen Length (m)	4.6
Lithology (depths in metres)	Topsoil to 1.5, Fine Sand to 12.4, Gravel and Medium Sand to 24.2
Aquifer	Red Medium Sand and Clay to 27.3
Overburden, Metwater Channel Deposit	

Municipality	Dufferin County
Township	Amaranth
Concession	1
Lot	1
Well #	Orangeville Production Well # 5
Easting	569520
Northing	4862500
Elevation (m)	469.7
Date Drilled	November 1971
Depth Water Found (m)	2.1
Static Water Level (m)	2.1
Pump Level (m)	3.6
Pump Testing Rate (l/min)	3295.5
Testing Time (hrs)	86.5
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	508
Screen Depth (m)	11.5
Screen Length (m)	6.1
Lithology (depths in metres)	Grey Topsoil and Stones to 1.5, Grey Clay and Gravel to 4.6, Grey Gravel and Medium Sand to 17.6
Aquifer	Overburden, Metwater Channel Deposit
Transmissivity (m ² /2 day)	835 (Ref. Final Report, Well Capacity Study, Town of Orangeville)

Municipality	Dufferin County
Township	Mono
Concession	HS E 1
Lot	2
Well #	Island Lake Estates Subdv. Production Well
Easting	574600
Northing	4865720
Elevation (m)	Unknown
Date Drilled	September 20, 1988
Depth Water Found (m)	57.90
Static Water Level (m)	3.68
Pump Level (m)	48.7
Pump Testing Rate (l/min)	910
Testing Time (hrs)	24
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	152.4
Screen Depth (m)	51.22
Screen Length (m)	6.70
Lithology (depths in metres)	Brown Sand with Clay Streaks to 1.52, Brown Sand with Gravel and Clay Layers to 10.67, Brown Clay with Sand and Gravel to 15.5, Grey Clay to 30.49, Grey Clay with Sand to 39.63, Brown Sand with Gravel Streaks to 59.15, Red - Grey Shale to 59.76
Aquifer	Overburden, Melwater Channel Deposit
Transmissivity (m ² /day)	Pump Test T value = 98, Recovery Curve indicates similar T value.
Storage Coefficient	Unknown
Specific Capacity (L/min/m)	A Step Test at rates of 455, 680, 910, 1135, and 1160 L/min. at 30 min. steps indicates Specific Capacities ranging from 32.1 to 33.1 L/min/metre

Municipality	Dufferin County
Township	Mono
Concession	EHS 2
Lot	1
Well #	Coles Industrial Devl. Production Well # 1
Easting	576170
Northing	4864480
Elevation (m)	437
Date Drilled	November 1988
Depth Water Found (m)	61.0
Static Water Level (m)	21.27
Pump Level (m)	36.34
Pump Testing Rate (l/min)	397
Testing Time (hrs)	96
Kind Of Water	Fresh
Water Use	Commercial / Municipal
Casing Diameter (mm)	258.9, 207.9, 158.8
Screen Depth (m)	62.33
Screen Length (m)	19.48
Lithology (depths in metres)	Staley Gravel to 9.75, Grey Clay to 52.73, Grey Sandy Clay to 60.96, Dirty Fine Sand to 82.30
Aquifer	Overburden, Ice Contact Drift Deposits
Transmissivity (m ² /day)	65
Storage Coefficient	Unknown
Specific Capacity (L/min/meter)	26

Municipality	Region of Peel
Township	Caledon
Concession	HSE 1
Lot	2
Well #	MOE # 4690, Village of Inglewood Production Well # 1
Easting	587050
Northing	4850630
Elevation (m)	256.2
Date Drilled	January 1975
Depth Water Found (m)	5.2
Static Water Level (m)	1.8
Pump Level (m)	2.4
Pump Testing Rate (l/min)	909.1
Testing Time (hrs)	93
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	250
Screen Depth (m)	5.2
Screen Length (m)	2.1
Lithology (depths in metres)	Red Topsoil to 0.30, Red Cemented Sand and Gravel to 5.18, Grey Sand and Gravel to 7.32, Grey Clay to 11.28, Red Shale to 13.12
Aquifer	Overburden, Ice Contact Drift

Municipality	Region of Peel
Township	Caledon
Concession	HSE W 1
Lot	3
Well #	Village of Inglewood, Test Well # 5, Proposed Production Well # 3
Easting	Unknown
Northing	Unknown
Elevation (m)	Unknown
Date Drilled	April 28, 1992
Depth Water Found (m)	57.93
Static Water Level (m)	0.99
Pump Level (m)	Unknown
Pump Testing Rate (l/min)	Unknown
Testing Time (hrs)	Unknown
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	152.5
Screen Depth (m)	54.88
Screen Length (m)	3.05
Lithology (depths in metres)	Black Muck to 1.83, Grey-Black Sand with Clay and Gravel to 10.67, Brown Gravel with Clay Layers to 13.72, Grey Sand with Clay and Gravel Layers to 33.54, Grey-Brown Fine Sand to 53.35, Grey-Brown Sand with Stones and Gravel Layers to 59.45, Grey Shale to 60.37
Aquifer	Overburden, Melwater Channel Deposits
Transmissivity (m ² /day)	A 24 hr Pump Test at 680 L/min estimated the Transmissivity to be 45.0
Storage Coefficient	Unknown
Specific Capacity (L/min/meter)	A preliminary Step-Drawdown Test was conducted at rates of 114, 227, and 341 L/min with water levels allowed to recover between stages. The resulting Specific Capacities for each stage were 34, 37, and 37 L/min/metric.
	After development, a Step-Drawdown Test was conducted at rates of 227, 409, 545, and 680 L/min for 1 hr steps with water levels allowed to recover between stages. Specific Capacities for each stage were 60, 53, 37 and 23 L/min/metric.
	The 24 hr Performance Test at 680 L/min, indicated the Specific Capacity to be 18 L/min/metric.

Municipality	Region of Peel	
Township	Brampton	
Concession	HSW 5	
Lot	4	
Well #	1977	
Easting	597020	
Northing	4832598	
Elevation (m)	209.1	
Date Drilled	May 1965	
Depth Water Found (m)	45.8	
Static Water Level (m)	8.2	
Pump Level (m)	Unknown	
Pump Testing Rate (l/min)	5000	
Testing Time (hrs)	24	
Kind Of Water	Fresh	
Water Use	Municipal	
Casing Diameter (mm)	400	
Screen Depth (m)	47.3	
Screen Length (m)	6.4	
Lithology (depths in metres)	Clay and Medium Sand to 3.0, Gravel with Medium Sand and Clay to 7.6,	
	Medium Sand and Clay to 18.2, Gravel with Medium Sand and Clay to 30.9,	
	Gravel with Clay and Boulders to 34.9, Clay and Medium Sand to 41.2,	
	Clay with Medium Sand and Gravel to 45.8, Coarse Sand and Gravel to 53.3,	
	Clay and Medium Sand to 54.2	
Aquifer	Overburden, Ice Contact Drift ?	

Municipality	Region of Peel	
Township	Caledon	
Concession	HSW 1	
Lot	2	
Well #	Unknown	
Easting	587060	
Northing	4850560	
Elevation (m)	265.2	
Date Drilled	September 1978	
Depth Water Found (m)	4.9	
Static Water Level (m)	2.4	
Pump Level (m)	3.3	
Pump Testing Rate (l/min)	Unknown	
Testing Time (hrs)	Unknown	
Kind Of Water	Unknown	
Water Use	Municipal	
Casing Diameter (mm)	250	
Screen Depth (m)	6.1	
Screen Length (m)	1.8	
Lithology (depths in metres)	Clay with Sand and Gravel to 0.91, Brown Sand with Fine Gravel and Clay	
	to 1.07, Clay to 1.98, Brown Gravel with Sand and Clay to 3.51, Sand and	
	Gravel to 7.16, Sand to 8.38, Fine Sand with Clay Streaks to 9.42	
Aquifer	Overburden, Ice Contact Drift	

Municipality	Region of Peel
Township	Caledon
Concession	HS W 3
Lot	23
Well #	Village of Alton Municipal Well # 3
Easting	576075
Northing	4858080
Elevation (m)	396
Date Drilled	March 06, 1986
Depth Water Found (m)	11.5
Static Water Level (m)	3.28
Pump Level (m)	Unknown
Pump Testing Rate (l/min)	726
Testing Time (hrs)	72
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	255
Screen Depth (m)	17.2
Screen Length (m)	7.5
Lithology (depths in metres)	Coarse Sand and Stones to 5.2, Fine Brown sand to 11.6
	Coarse Gravel to 17.0, Very Coarse Gravel to 19.5
	Fine Gravel and Sand with Stones to 24.7, Brown Clay to 26.5
Aquifer	Overburden, Melwater Channel Deposits
Transmissivity (m ~ 2/day)	2382
Storage Coefficient	0.001
Specific Capacity (L/min/meter)	Unknown

Municipality	Region of Peel
Township	Caledon
Concession	HS W 3
Lot	23
Well #	Village of Alton Municipal Well # 4
Easting	576070
Northing	4858090
Elevation (m)	396
Date Drilled	March 11, 1986
Depth Water Found (m)	14.6
Static Water Level (m)	3.56
Pump Level (m)	Unknown
Pump Testing Rate (l/min)	726
Testing Time (hrs)	24
Kind Of Water	Fresh
Water Use	Municipal
Casing Diameter (mm)	Unknown
Screen Depth (m)	14.6
Screen Length (m)	7.6
Lithology (depths in metres)	Fine and Coarse Gravel to 4.9, Gravel with Sand and Boulders to 15.2,
	Coarse Sand to 19.2, Coarse Sand and Stones to 19.8
	Coarse Sand with Fine Gravel to 23.5, Fine Sand to 25.3
Aquifer	Overburden, Melwater Channel Deposits
Transmissivity (m ~ 2/day)	2382
Storage Coefficient	0.001
Specific Capacity (L/min/meter)	Unknown

APPENDIX III

BASEFLOW ON MONTHLY AND ANNUAL BASIS,
MONTHLY AND ANNUAL MEANS, AND ANNUAL RATIOS
OF BASEFLOW TO STREAMFLOW

Baseflow Analysis (All values in mm)

Station Name : Orangeville

Station Number : 02HB013

Period of Record : 1967-1990

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Baseflow as % of total runoff
1967	---	---	---	---	---	---	---	---	---	17	14	22	---	---
1968	18	22	31	22	20	14	14	16	17	18	14	16	222	61
1969	15	13	21	31	22	17	18	17	10	13	15	9	202	57
1970	9	9	9	17	14	11	9	12	15	15	15	15	150	65
1971	15	13	17	20	11	12	13	14	8	7	8	12	150	64
1972	12	8	10	23	13	11	10	10	13	15	16	17	159	69
1973	20	18	24	23	18	14	11	18	14	15	17	16	208	64
1974	17	15	27	28	22	13	11	10	10	11	11	11	186	62
1975	11	12	15	22	15	12	11	14	15	15	14	16	171	67
1976	14	16	29	20	19	14	16	14	15	16	16	15	204	66
1977	13	13	26	17	12	9	10	14	16	20	17	18	185	67
1978	18	15	21	25	17	13	13	17	18	16	17	17	206	57
1979	18	15	26	28	20	17	16	16	15	17	19	19	227	59
1980	18	13	18	26	18	15	19	16	16	17	16	18	211	69
1981	16	20	16	15	12	10	10	13	16	16	19	18	180	68
1982	16	13	18	25	14	17	15	15	16	17	21	28	215	58
1983	21	20	19	20	22	14	13	13	12	15	16	17	203	68
1984	14	19	20	22	16	13	13	14	13	10	14	17	184	65
1985	15	17	24	28	16	14	11	11	16	14	16	16	199	58
1986	16	13	22	16	13	13	10	13	19	17	13	12	176	55
1987	12	12	23	22	14	11	13	11	12	14	14	16	173	67
1988	17	18	21	14	12	8	6	9	11	12	14	14	154	71
1989	17	12	21	18	16	14	8	11	11	11	14	16	168	74
1990	17	16	33	16	15	11	9	10	10	13	16	17	185	65
mean	16	15	21	22	16	13	12	13	14	15	15	16	188	64

Baseflow Analysis (All values in mm)

Station Name : Alton

Station Number : 02HB019

Period of Record : 1983–1990

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Baseflow as % of total runoff
1983	---	---	---	43	40	25	15	15	13	17	17	18	---	---
1984	17	21	22	26	20	18	18	15	17	19	21	24	238	62
1985	20	24	34	41	22	21	17	18	24	20	27	25	290	60
1986	21	18	29	24	22	17	19	16	21	18	15	19	238	52
1987	15	13	23	23	14	16	19	18	17	20	20	23	221	59
1988	21	22	27	24	21	13	9	12	12	18	19	20	217	73
1989	21	17	30	27	26	22	14	13	14	16	23	19	243	74
1990	21	21	41	20	21	18	16	16	17	20	19	23	253	62
mean	19	19	29	29	23	19	16	15	17	18	20	21	243	63

Baseflow Analysis (All values in mm)

Station Name : Cataract

Station Number : 02HB001

Period of Record : 1950–1990

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Baseflow as % of total runoff
1950	22	14	23	51	16	11	8	7	8	9	9	11	189	59
1951	13	14	19	24	13	11	9	7	7	9	15	12	152	54
1952	13	11	19	20	13	9	8	8	7	7	14	14	143	65
1953	14	16	25	16	21	15	15	12	12	13	13	14	187	72
1954	16	19	40	24	16	12	10	12	13	31	22	16	230	57
1955	23	19	29	23	15	15	12	13	13	17	19	16	214	59
1956	15	12	16	41	29	14	16	16	16	12	13	13	215	53
1957	14	16	19	19	17	14	12	8	10	11	12	14	167	67
1958	12	10	14	14	11	7	7	6	9	9	9	9	118	86
1959	8	8	13	28	16	11	9	11	10	13	14	13	155	58
1960	13	12	14	29	24	15	14	13	11	13	14	12	183	60
1961	10	14	19	17	14	12	10	9	9	9	10	11	146	69
1962	8	7	16	16	11	9	8	7	7	10	16	13	127	74
1963	9	8	18	18	14	7	6	8	8	7	10	8	121	76
1964	10	8	16	18	14	9	9	10	7	9	10	11	131	76
1965	12	20	14	29	16	10	8	9	9	12	14	15	166	60
1966	15	16	20	16	16	13	8	12	9	11	12	13	161	73
1967	13	12	17	20	14	14	14	13	12	16	15	21	180	63
1968	16	19	28	20	17	15	14	17	18	17	18	19	218	63
1969	17	15	23	34	25	17	17	15	11	13	14	13	215	61
1970	12	11	13	19	14	12	13	11	13	15	15	15	164	72
1971	14	13	15	23	15	14	14	13	12	12	12	14	171	68
1972	13	11	13	33	15	14	13	12	12	14	14	14	177	64
1973	16	15	27	19	17	15	11	14	11	13	14	14	186	61
1974	15	14	27	25	21	14	12	11	12	13	13	13	189	62
1975	14	13	17	28	17	14	11	12	13	13	13	14	179	71
1976	13	13	29	19	18	14	14	13	13	15	14	13	187	62
1977	12	11	26	15	12	10	10	12	13	16	13	14	164	64
1978	13	11	14	26	18	12	12	13	15	14	14	15	177	56
1979	14	12	24	28	18	15	14	14	13	14	15	16	197	60
1980	16	13	22	20	16	13	15	13	13	14	13	14	182	66
1981	12	18	15	14	13	12	12	12	13	14	15	14	164	68
1982	13	12	17	29	14	16	13	14	13	14	16	22	193	59
1983	16	17	18	19	20	14	13	14	12	12	13	13	180	57
1984	11	16	16	21	14	12	12	13	13	13	15	16	172	57
1985	14	17	26	31	16	15	14	14	16	14	16	15	207	53
1986	15	12	20	16	15	14	14	15	18	18	15	15	188	56
1987	15	13	21	24	15	13	14	12	11	13	12	15	178	62
1988	15	15	17	14	13	11	10	9	10	12	14	14	155	67
1989	14	12	22	18	18	15	10	11	11	12	14	13	170	74
1990	14	14	29	14	15	12	12	12	12	16	15	18	183	64
mean	14	14	20	23	16	13	12	12	12	13	14	14	175	64

Baseflow Analysis (All values in mm)

Station Name : Norval S. Cr.

Station Number : 02HB008

Period of Record : 1960-1990

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Baseflow as % of total runoff
1960	---	---	---	---	---	---	---	---	---	7	9	8	---	---
1961	6	12	17	13	8	8	9	10	9	9	9	11	120	42
1962	14	9	14	13	9	7	7	6	5	---	---	---	---	---
1963	11	10	22	13	11	9	7	7	7	6	7	7	114	60
1964	5	7	11	11	11	9	8	7	6	6	6	9	96	56
1965	13	21	16	29	13	8	8	7	6	10	13	16	160	48
1966	12	15	18	14	13	9	6	6	4	5	8	12	123	53
1967	12	10	16	21	14	14	16	11	9	13	13	16	165	49
1968	13	21	28	18	16	13	10	13	13	12	16	16	189	53
1969	14	13	20	24	19	11	10	10	6	8	11	10	157	49
1970	9	9	13	20	13	10	11	8	10	11	12	14	141	54
1971	11	11	15	23	12	13	12	11	10	9	10	14	151	49
1972	12	10	14	33	16	12	12	9	8	10	11	12	161	46
1973	16	18	26	16	13	10	10	9	8	9	11	12	159	41
1974	16	13	24	20	27	13	11	9	8	9	11	11	171	48
1975	13	17	22	23	18	12	10	10	10	11	12	14	171	49
1976	12	17	31	22	17	12	13	11	13	11	10	10	180	43
1977	9	9	25	19	11	9	9	10	12	14	13	13	154	44
1978	11	10	15	25	15	9	9	8	11	11	10	11	146	43
1979	12	10	30	35	21	12	10	10	10	11	13	20	195	42
1980	17	10	19	26	17	12	12	9	9	10	11	13	166	57
1981	9	16	11	11	10	9	9	9	13	16	14	11	137	50
1982	12	10	24	27	14	18	16	11	11	12	15	24	193	44
1983	15	17	18	25	19	13	10	10	9	11	12	13	171	47
1984	11	20	20	24	15	14	11	10	10	10	12	14	170	44
1985	12	16	26	24	13	12	10	11	13	13	22	16	188	37
1986	16	12	22	17	15	13	14	16	26	20	14	15	200	39
1987	13	11	22	20	12	11	11	7	9	10	11	14	149	48
1988	12	13	17	14	11	8	8	8	9	10	12	10	134	58
1989	12	10	14	12	10	11	9	7	7	9	11	8	120	54
1990	12	13	21	13	14	10	9	9	8	12	13	23	158	48
mean	12	13	20	20	14	11	10	9	10	11	12	13	157	48

Baseflow Analysis (All values in mm)

Station Name : Boston Mills

Station Number : 02HB018

Period of Record : 1982-1990

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Baseflow as % of total runoff
1982	---	---	---	---	---	---	---	---	18	19	22	31	---	---
1983	23	24	26	31	28	20	17	17	15	19	20	22	261	66
1984	18	24	25	30	22	19	17	14	17	17	19	22	245	63
1985	20	25	33	39	22	20	17	17	20	20	25	27	286	59
1986	23	18	26	23	21	21	21	21	28	26	21	21	270	60
1987	20	18	30	30	20	17	18	15	15	19	18	20	241	69
1988	21	23	26	24	21	14	11	12	16	17	18	17	221	76
1989	19	16	26	22	22	19	12	13	13	15	18	14	208	76
1990	19	18	35	18	20	17	15	14	14	19	21	25	235	64
mean	21	21	28	27	22	18	16	15	17	19	20	22	246	66

Baseflow Analysis (All values in mm)

Station Name : Norval C.R.

Station Number : 02HB025

Period of Record : 1988–1990

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Baseflow as % of total runoff
1988	---	---	---	---	---	---	---	---	---	---	17	16	---	---
1989	17	14	22	17	17	16	12	11	10	12	15	14	177	71
1990	17	19	32	16	18	14	13	12	11	14	15	22	204	59
mean	17	16	27	17	18	15	12	12	11	13	16	17	190	65

Baseflow Analysis (All values in mm)

Station Name : Erindale

Station Number : 02HB002

Period of Record : 1950-1990

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Baseflow as % of total runoff
1950	14	8	21	45	17	17	8	7	5	7	7	14	171	47
1951	14	15	27	24	10	9	10	7	7	8	12	10	154	51
1952	12	18	32	25	12	10	8	9	8	9	10	9	162	46
1953	13	12	18	15	17	12	10	9	8	8	8	10	139	63
1954	15	23	32	30	17	11	7	7	8	28	14	20	213	55
1955	18	23	30	27	13	8	5	6	6	9	14	13	173	57
1956	15	14	23	30	24	13	15	13	14	11	11	12	195	45
1957	15	14	18	15	12	10	9	6	8	9	11	13	142	48
1958	10	9	12	10	10	7	6	5	8	8	9	6	99	63
1959	6	11	24	17	8	8	7	6	5	9	10	9	118	48
1960	10	10	14	26	27	12	12	11	8	10	12	10	161	47
1961	5	8	12	12	8	9	9	9	8	7	9	9	103	44
1962	9	8	17	14	9	8	6	5	5	11	16	12	121	55
1963	9	7	24	15	15	7	7	8	6	6	8	7	119	68
1964	7	9	20	16	13	9	7	9	7	8	9	11	126	60
1965	15	23	18	30	15	8	8	7	7	10	12	14	166	50
1966	17	35	23	16	16	13	6	6	6	7	10	13	168	54
1967	14	10	17	21	12	15	14	11	11	14	13	23	174	48
1968	18	17	30	19	17	13	12	13	15	15	19	18	205	58
1969	17	18	26	30	24	14	13	12	9	10	13	12	198	54
1970	12	12	18	23	13	10	11	9	10	11	12	14	157	55
1971	12	11	20	23	12	11	12	10	8	8	11	13	150	55
1972	14	11	17	37	15	12	12	10	9	11	13	14	174	47
1973	16	17	29	17	14	11	10	11	9	11	15	14	173	44
1974	19	14	27	26	44	23	14	11	10	11	12	12	224	54
1975	12	18	20	31	19	11	9	9	11	10	11	13	176	54
1976	9	17	39	20	18	11	11	10	12	12	11	9	179	46
1977	9	10	33	20	11	9	9	10	15	18	14	17	175	48
1978	12	11	20	31	15	10	9	10	12	11	11	11	163	47
1979	13	11	28	31	17	11	10	11	10	10	12	21	185	46
1980	13	9	18	23	15	11	13	12	11	12	10	12	158	58
1981	10	20	11	11	11	10	13	11	15	17	17	13	161	56
1982	11	8	25	26	13	17	17	15	14	15	19	27	207	48
1983	17	21	25	30	26	18	16	16	14	16	16	18	233	61
1984	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1985	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1986	---	---	---	---	22	17	17	15	12	30	26	13	---	---
1987	21	19	14	23	26	12	11	13	10	9	11	12	181	46
1988	15	13	21	15	24	12	11	7	8	8	9	11	154	57
1989	11	13	13	15	20	13	15	13	9	8	8	13	151	58
1990	13	13	17	29	16	15	15	10	10	10	12	14	174	54
mean	13	14	22	23	17	12	11	10	9	11	12	13	165	52

APPENDIX IV

WATER QUALITY DATA FOR BEDROCK WELLS

REMARK CODES FOR APPENDIX IV

< value < W = No Measurable Response (Zero) : < Reported Value

value < T = A Measurable Trace Amount

< value < = Less Than Reported Value

U = Unknown

-- = No Data

SAMPLE TYPE: R = Raw Water T = Treated Water

REPORT TYPE: B = Background Water Quality I = Water Quality Interference Investigation

LOCATIONS AND DESCRIPTIONS OF WATER QUALITY DATA POINTS IN THE BEDROCK

SITE #	COUNTY	TOWNSHIP	CONC.	LOT	WELL NAME	WELL TYPE	DEPTH WATER FOUND (m)	MOE WELL #	UTM EASTING	UTM NORTHING
1	Peel	Caledon	HSE1	16	Caledon Well # 1	M	-	-	581175	4857950
2	Peel	Caledon	HSE1	16	Caledon Well # 2	M	-	-	581080	4857900
3	Peel	Caledon	HS W1	22	McLeodville Well # 1	M	-	-	577700	4859400
4	Peel	Caledon	HS W1	22	McLeodville Well # 2	M	-	-	577670	4859470
5	Peel	Caledon	HS W1	22	McLeodville Well # 3	M	25.3, 26.8	-	577650	4859470
6	Peel	Caledon	HS E2	22	Skywood Park Well # 1	M	25.9, 30.5	-	578925	4861790
7	Peel	Caledon	HS E2	22	Skywood Park Well # 2	M	26.8, 30.5, 43.9	-	579070	4861860
8	Peel	Caledon	HS E2	23	Skywood Park Well # 3	M	18.3	-	578710	4861930
9	Halton	Esquesing	3	31	Acton, Davidson Well # 1	M	-	-	576855	4833065
10	Halton	Esquesing	3	31	Acton, Davidson Well # 2	M	-	-	576850	4833060
11	Halton	Esquesing	4	32	Acton, 4th Line Well	M	-	-	576980	4835080
12	Halton	Esquesing	3	30	Acton, 2nd Line Well	M	12.2	868	576585	4831750
13	Halton	Esquesing	3	29	Acton, Warren Grove Well	M	-	-	577460	4831810
14	Wellington	Erin	10	17	Erin Well # 5	M	-	-	574279	4847742
15	Wellington	Erin	9	17	Erin Well # 7	M	15.2	-	573357	4847185
16	Wellington	Erin	9	17	Erin Well # 8	M	18.9	-	573315	4846623
17	Wellington	Erin			Hillsburgh Well # 1	M	-	-	569065	4848969
18	Wellington	Erin	8	25	Hillsburgh Well # 2	M	-	-	568233	4849270
19	Dufferin	Town of Orangeville	8	26	Orangeville Well # 2 A	M	-	-	570115	4862274
20	Dufferin	Town of Orangeville			Orangeville Well # 3	M	-	-	570669	4862420
21	Dufferin	Town of Orangeville			Orangeville Well # 4	M	-	-	571355	4862499
22	Dufferin	Town of Orangeville			Orangeville Well # 6	M	-	-	571364	4860338
23	Dufferin	Town of Orangeville			Orangeville Well # 7	M	-	-	570489	4862848
24	Dufferin	Town of Orangeville			Orangeville Well # 8A	M	-	-	570813	4863958
25	Dufferin	Town of Orangeville			Orangeville Well # 8B	M	-	-	570800	4864013
26	Dufferin	Town of Orangeville			Orangeville Well # 8C	M	-	-	570740	4864046

SITE #	COUNTY	TOWNSHIP	CONC.	LOT	WELL NAME	WELL TYPE	DEPTH WATER FOUND (m)	MOE WELL #	UTM EASTING	UTM NORTHING
--------	--------	----------	-------	-----	-----------	-----------	-----------------------	------------	-------------	--------------

27	Dufferin	East Garafraxa	C	4	Orangeville Well # 9	M	-	-	569890	4861900
28	Dufferin	Mono	HSE 1	1	Purple Hill # 1	M	-	-	574600	4864020
29	Dufferin	Mono	HSE 1	1	Purple Hill # 2	M	19.2	-	574600	4864070
30	Dufferin	Mono	HSE 1	1	Purple Hill # 3	M	19.8	-	574560	4864015
31	Dufferin	Mono	HSE 1	1	Purple Hill # 4	M	6.1	-	574480	4864090
32	Dufferin	Mono	HSE 1	1	Purple Hill # 5	M	6.1	-	574350	4864130
33	Dufferin	Mono	HSW 2	6	Cardinal Woods Well # 1	M	36.89	-	571280	4865910
34	Dufferin	Mono	HSW 2	6	Cardinal Woods Well # 2	M	-	-	571400	4865980
35	Dufferin	Mono	HSW 2	6	Brett Farm Subdv.	M	23.8, 25.9, 29.0	-	571625	4866140
36	Dufferin	Amaranth	1	3	United Lands Pump Well	M	-	-	569350	4863940
37	Peel	Chinguacousy	HSW1	18	Private Well	P	22.9	4557	593468	4842255
38	Peel	Chinguacousy	HS W6	33	Private Well	P	10.1	3117	583075	4844155
39	Peel	Chinguacousy	HS W6	33	Private Well	P	12.2, 20.7	3075	584065	4844645
40	Peel	Caledon	HS W1	7	Private Well	P	42.7, 46.6	4042	584030	4853075
41	Peel	Caledon	HSW2	30	Test Well	T	29.3, 32.9, 36.6	-	572840	4861310
42	Peel	Caledon	HS W3	5	Private Well	P	10.7	4404	583075	4850450
43	Peel	Caledon	HS W4	1	Private Well	P	18.3	3962	584475	4846775
44	Peel	Caledon	HS W4	6	Private Well	P	23.5	4573	582050	4849255
45	Peel	Caledon	HS W4	16	Private Well	P	18.3	3531	577150	4852600
46	Peel	Caledon	HS W5	25	Private Well	P	56.7	3146	573052	4859323
47	Peel	Caledon	HS W6	7	Private Well	P	31.7	1046	580090	4848500
48	Peel	Caledon	HS W6	16	Private Well	P	25.3	1054	576073	4851578
49	Peel	Caledon	HS W6	17	Private Well	P	29.0	4485	575782	4851619
50	Peel	Caledon	HS W6	19	Private Well	P	45.1	1057	575063	4853650
51	Peel	Caledon	HS W6	25	Private Well	P	32.0	1063	572048	4855147
52	Peel	Caledon	HS W6	29	Private Well	P	45.4	1068	571049	4857900
53	Peel	Caledon	HS W6	30	Private Well	P	54.9, 71.6	4368	569763	4857551
54	Peel	Caledon	HS E1	17	Private Well	P	14.0, 21.3	573	581055	4859295
55	Peel	Caledon	HS E1	20	Private Well	P	18.9	2919	579070	4859100
56	Peel	Caledon	HS E1	22	Private Well	P	24.4	4631	578741	4860377

SITE #	COUNTY	TOWNSHIP	CONC.	LOT	WELL NAME	WELL TYPE	DEPTH WATER FOUND (m)	MOE WELL #	UTM EASTING	UTM NORTHING
57	Peel	Caledon	HS E1	26	Private Well	P	16.8	582	578048	4863045
58	Peel	Caledon	HS E2	26	Private Well	P	24.7	3126	578050	4864282
59	Peel	Caledon	HS E3	16	Private Well	P	27.4	624	583065	4860250
60	Peel	Caledon	HS E3	20	Private Well	P	37.8	3952	581070	4861875
61	Peel	Caledon	HS E4	16	Private Well	P	39.6, 50.3	4340	583010	4861235
62	Peel	Brampton (Ching.)	HS W1	17	Private Well	P	30.5	1615	593951	4841959
63	Peel	Brampton (Ching.)	HS W3	9	Private Well	P	14.6	1804	596597	4836879
64	Peel	Mississauga (Toronto)	DS S3	35	Private Well	P	6.1	-	610500	4815630
65	Halton	Esquesing	6	22	Private Well	P	16.8, 19.8, 27.4	1053	583102	4832837
66	Halton	Esquesing	6	30	Private Well	P	19.8, 25.9	1085	579600	4836266
67	Halton	Esquesing	9	21	Private Well	P	9.1	1412	585420	4834700
68	Halton	Esquesing	9	21	Private Well	P	12.8, 19.8	4957	585500	4834500
69	Halton	Esquesing	9	32	Private Well	P	-	-	581525	4840400
70	Halton	Esquesing	11	27	Private Well	P	16.5	1632	584440	4839450
71	Wellington	Erin	6	1	Private Well	P	16.8, 25.0	662	577930	4836250
72	Wellington	Erin	9	13	Private Well	P	18.0	3349	575500	4845520
73	Wellington	Erin	9	13	Private Well	P	45.1	3175	575250	4844850
74	Wellington	Erin	9	23	Private Well	P	45.1	771	570650	4848960
75	Wellington	Erin	9	27	Private Well	P	32.9	6108	569500	4851750
76	Wellington	Erin	10	6	Private Well	P	9.8	5168	579900	4843750
77	Wellington	Erin	10	21	Private Well	P	-	-	573210	4850150
78	Wellington	Erin	11	15	Private Well	P	3.7	813	575806	4848077
79	Wellington	Erin	11	17	Private Well	P	-	-	575460	4849800
80	Wellington	Village of Erin	Municipal Test Well 1/85		T		9.1	-	575150	4847650
81	Wellington	Village of Erin			Private Well	P	25.9, 45.4	5649	573800	4847702
82	Wellington	Village of Erin			Private Well	P	41.5	-	573806	4847702
83	Wellington	Village of Erin			Private Well	P	21.3	-	573950	4847800
84	Wellington	Village of Erin			Test Well # 1	T	9.8, 12.5	7552	574300	4847500
85	Wellington	Village of Erin			Test Well # 2	T	6.1, 9.1	7551	574150	4847700
86	Dufferin	Mono	HS W2	5	Private Well	P	50.0	-	571706	4865730

SITE #	COUNTY	TOWNSHIP	CONC.	LOT	WELL NAME	WELL TYPE	DEPTH WATER FOUND (m)	MOE WELL #	UTM EASTING	UTM NORTHING
87	Dufferin	Mono	HS W2	6	Willmore Ltd Test Well	T	36.9	--	571300	4865970
88	Dufferin	Mono	HS W3	1	Private Well	P	--	--	569820	4862325
89	Dufferin	Mono	HS W3	3	Private Well	P	30.5	--	569700	4863830
90	Dufferin	Mono	HS E1	2	Private Well	P	37.2	1282	574900	4864435
91	Dufferin	Amaranth	1	4	Private Well	P	--	--	569310	4864090
92	Dufferin	East Garafraxa	C	5	Private Well	P	41.2	1356	568825	4861930

TABLE REMARKS

WELL TYPE CODE

M = Municipal Water Supply

P = Private Water Supply

T = Test Well

UTM ZONE = 17

-- = No Data

WATER QUALITY DATA : MAJOR CONVENTIONAL PARAMETERS FOR BEDROCK WELLS

(Concentrations in MG/L unless otherwise noted)

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
1	Jul 07, 1982	R	B	801.00	336.60	82.50	31.80	21.50	6.75	275.60	7.84	0.05	70.00	32.00	0.12
1	Dec 14, 1982	R	B	900.00	396.00	102.00	34.50	35.50	0.80	278.40	7.80	0.08	106.40	34.00	-
1	Jul 12, 1983	R	B	926.00	399.70	102.50	35.00	41.00	-	-	7.80	0.06	108.60	38.00	1.50
1	Jan 24, 1984	R	B	850.00	358.80	86.00	35.00	33.70	-	260.60	-	0.05	88.00	33.50	0.27
1	May 14, 1984	R	B	858.00	401.10	98.00	38.00	39.00	-	276.40	7.56	0.06	93.00	31.00	0.17
1	Sep 17, 1984	R	B	814.00	380.10	97.00	33.50	38.00	-	285.20	7.53	0.06	96.00	34.00	0.33
1	Oct 14, 1986	R	B	994.00	364.00	87.60	35.30	66.80	1.29	263.70	8.11	.05<T	143.00	27.00	.72<T
1	Dec 17, 1986	R	B	834.00	318.00	71.10	34.10	49.20	0.81	239.50	8.19	.05<T	104.00	25.30	2.22
1	May 16, 1988	R	B	1009.00	373.00	94.00	33.60	58.40	0.85	299.80	8.11	.04<T	124.00	28.40	0.74
1	Dec 22, 1988	R	B	1025.00	407.00	104.00	35.70	63.60	0.95	298.60	7.98	.02<T	139.00	41.48	1.72
2	Jul 07, 1982	R	B	1186.00	420.20	114.50	32.70	91.00	1.70	333.80	8.08	0.05	171.40	32.00	0.18
2	Dec 14, 1982	R	B	1214.00	438.00	118.00	35.00	92.00	1.15	261.40	7.56	0.05	182.00	37.00	-
2	Jul 12, 1983	R	B	1040.00	392.80	105.00	31.80	70.00	-	-	7.26	0.05	126.80	39.00	0.50
2	Dec 19, 1983	R	B	-	-	-	34.50	122.00	-	-	-	0.06	234.60	33.50	-
2	Jan 24, 1984	R	B	1070.00	425.40	111.00	36.00	81.50	-	312.00	-	0.05	159.80	34.50	0.35
2	Feb 09, 1984	R	B	1150.00	408.30	105.00	35.50	68.50	-	304.40	7.40	0.06	154.20	34.00	0.20
2	May 14, 1984	R	B	1043.00	396.70	102.00	34.50	80.00	-	276.80	7.45	0.06	150.00	37.00	0.19
2	Sep 17, 1984	R	B	1047.00	393.50	104.00	32.50	94.00	-	306.80	7.25	0.07	173.60	33.00	1.44
2	Oct 14, 1986	R	B	1155.00	372.50	93.70	33.60	101.00	1.44	284.00	8.16	0.08	183.00	30.40	.17<T
2	Dec 17, 1986	R	B	1041.00	312.00	72.30	31.90	97.50	1.02	252.30	8.17	0.06	161.00	30.80	.14
2	May 16, 1988	R	B	1237.00	365.00	96.60	30.10	107.00	1.10	308.70	8.08	.04<T	193.00	29.20	0.56
2	Dec 22, 1988	R	B	1175.00	404.00	108.00	32.50	106.00	1.15	321.60	7.89	.02<T	184.00	32.93	0.23
2	Apr 02, 1990	R	B	1470.00	411.00	111.00	32.50	137.00	1.30	298.40	8.21	.02<T	266.00	35.19	0.43
2	May 23, 1990	R	B	-	396.00	107.20	31.20	142.00	1.51	-	-	.02<T	240.00	38.51	0.16
2	May 01, 1991	R	B	-	362.60	95.80	30.00	114.10	1.10	-	-	.04<T	165.00	45.03	.18<T
2	Jun 18, 1991	R	B	1186.00	287.30	69.30	27.75	163.00	0.99	316.50	8.06	.04<T	177.00	31.76	0.30
2	Oct 08, 1991	T	B	1172.00	383.80	102.50	31.05	94.50	1.22	314.30	8.49	0.06	181.00	32.84	0.14

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
1	Jul 07, 1982	1.50	.01<W	-	.1<T	.1<W	4.20	.01<T	-	0.40	-	-
1	Dec 14, 1982	-	-	-	.1<T	-	4.30	-	-	0.40	-	-
1	Jul 12, 1983	1.90	-	-	2<T	.1<T	-	-	-	0.80	-	-
1	Jan 24, 1984	.1<W	-	-	.1<T	.1<W	3.80	-	-	0.80	-	-
1	May 14, 1984	1.0<T	-	-	3<T	.1<W	4.50	-	-	0.70	-	-
1	Sep 17, 1984	1.00	-	-	.10<T	.10<T	2.80	-	-	0.60	-	-
1	Oct 14, 1986	1.5<T	<.02<W	-	2<T	.1<T	6.00	<.005<W	-	-	-	-
1	Dec 17, 1986	1.5<T	<.01<W	-	<.05<W	<.05<W	3.25	<.005<W	-	-	-	-
1	May 16, 1988	.5<T	<.02<W	-	.10<T	.10<T	4.80	.005<T	-	0.50	-	-
1	Dec 22, 1988	.5<T	.02<T	-	.15<T	.05<T	4.60	.005<T	-	0.80	-	-
2	Jul 07, 1982	2.50	.01<W	-	3<T	.1<W	3.90	.01<T	-	0.80	-	-
2	Dec 14, 1982	-	-	-	2<T	-	4.20	-	-	0.70	-	-
2	Jul 12, 1983	.1<W	-	-	3<T	.1<W	-	-	-	1.10	-	-
2	Dec 19, 1983	-	-	-	0.40	.1<W	1.80	-	-	1.00	-	-
2	Jan 24, 1984	.7<T	-	-	.1<T	.1<W	4.80	-	-	1.00	-	-
2	Feb 09, 1984	1.50	-	-	.1<T	.1<W	4.60	-	-	0.90	-	-
2	May 14, 1984	1.50	-	-	3<T	.1<W	3.60	-	-	1.00	-	-
2	Sep 17, 1984	3.00	-	-	20<T	.05<W	0.75	-	-	1.10	-	-
2	Oct 14, 1986	1.5<T	<.02<W	-	2<T	.05<T	5.20	<.005<W	-	.5<T	-	-
2	Dec 17, 1986	1<T	<.01<W	-	.1<T	<.05<W	2.30	.015<T	-	-	-	-
2	May 16, 1988	1.0<T	<.02<W	-	.15<T	.10<T	3.70	.005<T	-	0.70	-	-
2	Dec 22, 1988	.5<T	.02<T	-	.15<T	.05<T	3.75	.005<T	-	0.80	-	-
2	Apr 02, 1990	.5<T	.02<T	-	.08<T	<.05<W	3.85	<.005<W	-	0.60	-	-
2	May 23, 1990	2.50	.02<T	-	0.25	-	-	-	-	2.10	-	-
2	May 01, 1991	1.0<T	<.02<W	-	.1<T	-	-	-	-	0.80	-	-
2	Jun 18, 1991	<.5<W	<.02<W	-	.15<T	<.05<W	3.60	.010<T	-	1.10	-	-
2	Oct 08, 1991	.5<T	.007<T	.0055	.110	<.002<W	4.43	<.0010<W	<.2<W	0.50	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
2	Mar 02, 1992	R	B	1340.00	393.40	104.70	32.05	118.00	1.35	312.90	8.24	.02<T	221.00	17.61	0.33
2	May 27, 1992	R	B	1154.00	304.90	73.10	29.70	156.00	1.01	297.00	8.23	.04<T	217.00	32.46	1.07
2	Jan 25, 1993	R	B	1046.00	368.00	97.20	30.35	97.20	1.18	329.70	8.08	.04<T	154.00	33.03	0.18
2	Jun 02, 1993	R	B	1029.00	365.60	100.00	28.20	105.00	1.00	308.20	8.13	.04<T	174.00	29.73	0.18
3	Jul 07, 1982	R	B	1069.00	465.60	121.00	39.80	52.00	12.20	344.60	8.32	0.05	118.80	45.50	0.46
3	Dec 14, 1982	R	B	865.00	397.00	95.00	39.00	24.00	3.60	283.40	7.92	0.06	94.00	38.50	-
3	Jul 12, 1983	R	B	875.00	412.40	101.00	39.00	23.50	-	-	7.58	0.07	83.80	41.50	0.30
3	Dec 19, 1983	R	B	-	-	-	42.50	24.00	-	-	7.80	1.48	90.20	40.00	-
3	Feb 09, 1984	R	B	925.00	420.60	100.00	41.50	26.40	-	285.60	7.76	0.06	98.20	38.50	0.20
3	May 14, 1984	R	B	851.00	429.70	102.00	42.50	26.50	-	285.60	7.67	0.06	85.60	37.00	0.16
3	Sep 17, 1984	R	B	893.00	424.80	105.00	39.50	33.80	-	304.60	7.44	0.08	115.60	38.00	0.20
3	Dec 18, 1985	R	B	1059.00	458.00	110.00	44.50	45.10	5.80	279.60	8.04	0.06	141.40	40.00	.18<T
3	Apr 24, 1986	R	B	1048.00	437.00	104.00	43.00	47.90	8.04	310.00	8.16	0.07	147.00	43.90	.18<T
3	Oct 14, 1986	R	B	1034.00	430.00	95.80	46.30	49.20	5.60	257.40	8.10	0.04	157.00	37.40	.13<T
3	Dec 17, 1986	R	B	975.00	386.00	85.30	42.10	44.50	3.76	241.00	8.14	0.08	142.00	42.20	0.54
3	Dec 21, 1987	R	B	1046.00	432.00	93.60	48.30	63.20	5.35	215.70	8.21	.04<T	189.00	43.00	0.37
3	May 16, 1988	R	B	1199.00	444.00	100.00	47.00	56.40	4.05	297.20	8.14	0.06	185.00	47.20	1.22
3	Dec 22, 1988	R	B	1081.00	441.00	110.00	40.50	56.40	5.00	305.80	8.12	.04<T	160.00	44.57	4.20
3	Nov 19, 1990	R	B	1450.00	515.40	121.50	51.50	90.00	6.40	325.00	7.98	0.06	245.00	46.55	0.55
3	Apr 22, 1991	R	B	-	314.80	114.60	46.20	72.90	5.00	-	-	.02<T	209.00	56.83	0.27
3	Jun 18, 1991	R	B	1520.00	465.70	108.00	47.50	106.00	8.60	298.00	8.10	.04<T	268.00	49.03	2.10
3	Mar 02, 1992	R	B	1510.00	476.70	121.80	41.95	109.00	-	-	-	-	-	-	-
4	Jul 07, 1982	R	B	1095.00	461.10	120.50	39.00	50.00	12.10	356.20	7.77	0.04	111.60	46.00	0.16
4	Dec 14, 1982	R	B	1070.00	457.00	119.00	39.00	52.00	10.60	345.20	7.65	0.05	123.20	45.50	-
4	Jul 12, 1983	R	B	1218.00	491.20	126.00	43.00	65.00	-	-	7.46	0.05	130.80	54.00	0.38
4	Dec 19, 1983	R	B	-	-	-	43.00	26.70	-	-	7.92	1.75	98.80	41.50	-
4	Feb 09, 1984	R	B	1130.00	460.50	116.00	41.50	52.00	-	365.00	7.46	0.05	110.00	48.50	1.50
4	May 14, 1984	R	B	1041.00	465.80	114.00	44.00	53.00	-	315.60	7.35	0.06	127.20	44.00	0.70
4	Sep 17, 1984	R	B	1072.00	466.40	120.00	40.50	64.50	-	370.40	7.38	0.05	142.60	44.00	0.47
4	Apr 24, 1986	R	B	1249.00	470.50	121.00	40.90	81.10	13.20	359.90	8.22	0.05	188.20	40.60	.14<T

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
2	Mar 02, 1992	5 < T	.02 < T	-	0.65	< .05 < W	4.75	.005 < T	-	1.00	-	-
2	May 27, 1992	5 < T	< .02 < W	-	20 < T	.10 < T	3.90	< .005 < W	-	2.50	-	-
2	Jan 25, 1993	5 < T	< .02 < W	-	.10 < T	.05 < T	3.95	< .005 < W	-	0.90	-	-
2	Jun 02, 1993	5 < T	< .02 < W	-	.15 < T	< .05 < W	3.10	< .005 < W	-	0.90	-	-
3	Jul 07, 1982	3.50	.1 < W	-	2 < T	.1 < W	4.60	.01 < T	-	0.90	-	-
3	Dec 14, 1982	-	-	-	.1 < T	-	3.10	-	-	0.30	-	-
3	Jul 12, 1983	.1 < W	-	-	.1 < T	.1 < W	-	-	-	0.90	-	-
3	Dec 19, 1983	.7 < T	-	-	.1 < T	0.20	3.20	-	-	0.60	-	-
3	Feb 09, 1984	.1 < W	-	-	.1 < T	.1 < W	3.10	-	-	0.50	-	-
3	May 14, 1984	.5 < W	-	-	20 < T	.1 < W	3.30	-	-	0.60	-	-
3	Sep 17, 1984	1.50	-	-	.10 < W	.05 < W	3.50	-	-	0.70	-	-
3	Dec 18, 1985	5 < T	< .010 < W	-	< .10 < W	< .05 < W	3.40	.010 < T	-	0.70	-	-
3	Apr 24, 1986	-	200 < T	-	20 < T	.05 < T	2.80	.005 < T	-	.4 < T	-	-
3	Oct 14, 1986	1.0 < T	< .02 < W	-	2 < T	< .05 < W	3.05	.005 < T	-	.3 < T	-	-
3	Dec 17, 1986	1 < T	< .01 < W	-	< .05 < W	< .05 < W	1.95	.01 < T	-	-	-	-
3	Dec 21, 1987	< .5 < W	.020 < T	-	.10 < T	.05 < T	2.80	-	-	-	-	-
3	May 16, 1988	1.0 < T	< .02 < W	-	.10 < T	.10 < T	2.80	0.025	-	0.60	-	-
3	Dec 22, 1988	1.0 < T	.02 < T	-	20 < T	< .05 < W	1.90	.005 < T	-	0.70	-	-
3	Nov 19, 1990	< .5 < W	.02 < T	-	.15 < T	< .05 < W	2.70	< .005 < W	-	0.60	-	-
3	Apr 22, 1991	2.00	.02 < T	-	.15 < T	< .05 < W	-	.005 < T	-	0.70	-	-
3	Jun 18, 1991	5 < T	.02 < T	-	.15 < T	.05 < T	2.70	.010 < T	-	1.10	-	-
3	Mar 02, 1992	-	-	-	-	-	-	-	-	-	-	-
4	Jul 07, 1982	2.00	.01 < W	-	2 < T	.1 < W	4.90	.01 < T	-	0.80	-	-
4	Dec 14, 1982	-	-	-	2 < T	-	4.00	-	-	0.60	-	-
4	Jul 12, 1983	.1 < W	-	-	2 < T	.1 < W	-	-	-	1.50	-	-
4	Dec 19, 1983	-	-	-	.1 < T	.1 < W	3.20	-	-	1.10	-	-
4	Feb 09, 1984	3.00	-	-	2 < T	.1 < W	2.70	-	-	1.20	-	-
4	May 14, 1984	5 < W	-	-	2 < T	.1 < W	3.90	-	-	0.80	-	-
4	Sep 17, 1984	1.00	-	-	20 < T	.05 < W	4.10	-	-	1.10	-	-
4	Apr 24, 1986	.5 < T	.020 < T	-	20 < T	.10 < T	.05 < T	< .005 < W	-	0.50	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
4	Oct 14, 1986	R	B	1182.00	430.00	101.00	43.40	79.20	13.20	298.50	8.04	.04<T	178.00	42.80	52<T
4	Dec 17, 1986	R	B	1196.00	401.00	91.90	41.70	78.80	15.60	304.40	8.05	.05<T	175.00	46.20	0.34
4	Dec 21, 1987	R	B	1048.00	408.00	98.40	39.40	58.20	10.70	299.80	8.12	.02<T	135.00	41.80	0.40
4	May 16, 1988	R	B	1221.00	414.00	98.40	40.80	66.20	10.40	357.10	8.08	.03<T	159.00	44.40	0.21
4	Dec 22, 1988	R	B	1350.00	502.00	131.00	42.60	87.80	19.20	400.20	8.05	<.01<W	188.00	49.42	1.12
4	Apr 02, 1990	R	B	1860.00	477.00	107.00	51.30	-	22.00	396.20	8.05	<.01<W	314.00	53.09	2.70
4	May 22, 1990	U	B	-	608.30	161.20	50.00	52.80	20.18	-	-	-	356.00	61.27	8.60
4	Nov 19, 1990	R	B	1700.00	567.80	148.00	48.15	135.70	22.81	414.10	7.81	.02<T	270.00	55.31	0.60
4	Jun 18, 1991	R	B	1790.00	391.00	84.00	44.00	177.00	18.00	335.00	7.99	.02<T	301.00	56.96	1.60
4	Mar 02, 1992	R	B	1510.00	476.70	121.80	41.95	109.00	22.75	390.30	8.18	.02<T	228.00	52.90	1.34
4	May 27, 1992	R	B	1760.00	391.40	83.30	44.55	167.00	19.40	203.00	8.05	.02<T	367.00	55.37	1.36
5	May 11, 1988	R	B	624.00	314.00	78.20	28.70	12.60	0.85	257.40	8.27	0.05	33.60	35.20	9.30
5	May 16, 1988	R	B	838.00	374.00	91.60	35.30	25.60	0.95	268.80	8.12	0.06	92.90	38.80	14.70
5	Dec 22, 1988	R	B	545.00	299.00	76.40	26.20	5.60	0.60	253.70	8.19	0.06	16.40	29.58	1.11
5	Apr 02, 1990	R	B	584.00	308.00	76.00	28.70	8.40	0.75	258.50	8.23	.04<T	22.10	24.94	1.47
5	Nov 19, 1990	R	B	595.00	317.30	79.60	28.80	10.30	0.74	261.40	7.93	0.06	26.00	23.65	0.52
5	Jan 31, 1991	T	B	604.00	318.30	80.60	28.45	12.60	0.75	266.30	8.16	0.06	32.20	24.31	-
5	Jan 31, 1991	R	B	595.00	318.30	80.70	28.40	11.40	0.77	264.60	8.23	0.06	30.50	25.01	-
5	Apr 22, 1991	R	B	-	310.50	78.10	29.10	12.90	.14<T	-	-	.04<T	37.70	37.52	0.41
5	Jun 18, 1991	R	B	649.00	252.00	53.60	28.80	13.80	0.80	210.30	8.23	0.06	37.80	24.72	21<T
5	Oct 08, 1991	T	B	613.00	305.60	77.30	27.35	12.60	0.67	264.10	8.68	0.06	30.80	25.22	0.19
5	Mar 02, 1992	R	B	599.00	305.70	76.80	27.70	11.20	0.74	262.90	8.39	.04<T	28.80	23.83	0.60
5	May 27, 1992	R	B	617.00	279.60	64.90	28.60	16.10	0.62	243.60	8.24	0.06	38.90	24.65	1.16
5	Jan 25, 1993	R	B	828.00	375.00	92.60	34.95	37.60	0.94	282.90	8.00	0.06	99.40	32.61	1.16
5	Mar 18, 1993	R	B	714.00	356.20	87.20	33.60	25.20	0.70	269.90	7.86	0.06	63.70	29.68	0.64
5	Jun 02, 1993	R	B	864.00	404.00	99.50	37.80	50.60	0.98	280.50	8.13	0.06	130.00	32.15	3.66
6	Dec 21, 1987	R	B	399.00	217.00	43.40	26.40	2.80	0.80	187.60	8.34	0.08	1.30	17.80	0.36
6	Feb 04, 1988	R	B	477.00	235.00	44.40	30.00	2.40	1.00	249.30	8.25	0.06	2.40	18.80	92.00
6	May 16, 1988	R	B	491.00	261.00	62.60	25.40	2.80	0.80	257.50	8.23	0.06	2.10	19.00	0.18
6	Dec 22, 1988	R	B	500.00	285.00	69.60	26.90	3.40	0.75	262.20	8.22	0.06	5.30	21.19	0.60

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
4	Oct 14, 1986	1.0<T	<.02<W	-	2<T	<.05<W	4.35	.005<T	-	.4<T	-	-
4	Dec 17, 1986	1<T	<.01<W	-	2<T	<.05<W	2.50	.005<T	-	-	-	-
4	Dec 21, 1987	5<T	.020<T	-	.10<T	<.05<W	3.45	<.005<W	-	-	-	-
4	May 16, 1988	5<T	<.02<W	-	.15<T	.10<T	3.65	.005<T	-	0.80	-	-
4	Dec 22, 1988	5<T	.02<T	-	0.25	.05<T	3.45	.005<T	-	1.20	-	-
4	Apr 02, 1990	1.0<T	<.02<W	-	.05<T	<.05<W	4.95	<.005<W	-	0.60	-	-
4	May 22, 1990	3.00	.02<T	-	.1<T	-	-	-	-	-	-	-
4	Nov 19, 1990	5<T	.02<T	-	.15<T	<.05<W	4.10	<.005<W	-	0.90	-	-
4	Jun 18, 1991	1.0<T	.02<T	-	.20<T	.05<T	5.00	.010<T	-	1.30	-	-
4	Mar 02, 1992	2.00	<.02<W	-	.20<T	<.05<W	3.25	.010<T	-	1.20	-	-
4	May 27, 1992	<5<W	<.02<W	-	0.25	.10<T	4.45	<.005<W	-	4.50	-	-
5	May 11, 1988	5<T	.02<T	-	.15<T	.05<T	1.65	.005<T	-	0.90	-	-
5	May 16, 1988	5<T	<.02<W	-	.15<T	.10<T	1.70	.005<T	-	0.80	-	-
5	Dec 22, 1988	<5<W	.02<T	-	.15<T	.05<T	1.45	.005<T	-	.4<T	-	-
5	Apr 02, 1990	<5<W	.02<T	-	<.05<W	<.05<W	1.40	<.005<W	-	3<T	-	-
5	Nov 19, 1990	<5<W	.02<T	-	.05<T	<.05<W	1.50	.005<T	-	2<T	-	-
5	Jan 31, 1991	-	<.02<W	-	-	-	1.55	<.005<W	-	-	-	-
5	Jan 31, 1991	-	<.02<W	-	-	-	1.55	<.005<W	-	-	-	-
5	Apr 22, 1991	0.50	.02<T	-	.05<T	<.05<W	-	<.005<W	-	.4<T	-	-
5	Jun 18, 1991	5<T	.02<T	-	.10<T	.05<T	1.85	.005<T	-	0.50	-	-
5	Oct 08, 1991	<5<W	.007<T	.0065	.050<T	<.002<W	1.48	<.0010<W	<2<W	<2<W	-	-
5	Mar 02, 1992	<5<W	<.02<W	-	.10<T	<.05<W	1.35	.020<T	-	0.50	-	-
5	May 27, 1992	<5<W	<.02<W	-	.10<T	.05<T	1.70	.005<T	-	1.70	-	-
5	Jan 25, 1993	<5<W	.02<T	-	.05<T	<.05<W	2.40	<.005<W	-	0.50	-	-
5	Mar 18, 1993	<5<W	.02<T	-	.05<T	<.05<W	2.00	.005<T	-	0.60	-	-
5	Jun 02, 1993	<5<W	<.02<W	-	.10<T	<.05<W	2.20	.005<T	-	0.60	-	-
6	Dec 21, 1987	<5<W	.020<T	-	<.05<W	<.05<W	0.35	<.005<W	-	-	-	-
6	Feb 04, 1988	<5<W	0.26	-	.10<T	.05<T	0.50	<.005<W	-	2<T	-	-
6	May 16, 1988	5<T	<.02<W	-	.05<T	.10<T	0.40	.010<T	-	.4<T	-	-
6	Dec 22, 1988	<5<W	.02<T	-	.10<T	.05<T	0.45	.005<T	-	.4<T	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
6	Apr 02, 1990	R	B	574.00	299.00	70.80	29.50	3.80	0.90	265.10	8.26	0.06	20.10	19.50	.17<T
6	May 22, 1990	U	B	574.00	298.90	72.50	28.65	6.50	0.88	261.90	8.22	0.06	23.90	19.91	0.21
6	Nov 19, 1990	R	B	617.00	321.30	79.60	30.25	9.10	0.90	340.00	7.92	0.06	32.50	20.14	0.18
6	Jan 31, 1991	R	B	585.00	305.10	73.50	29.55	8.90	0.89	269.50	8.25	0.06	29.90	19.78	-
6	Jan 31, 1991	T	B	600.00	321.90	79.80	29.85	10.10	0.88	272.50	8.08	0.06	33.00	19.91	-
6	Apr 22, 1991	R	B	697.00	255.80	70.80	29.70	7.50	0.50	-	-	.04<T	26.80	30.22	0.05
6	Jun 17, 1991	R	B	573.00	251.00	54.60	27.80	8.40	0.90	224.50	8.22	0.06	23.30	21.32	.14<T
6	Mar 02, 1992	R	B	687.00	334.90	82.50	31.35	17.50	0.94	283.80	8.43	.04<T	48.80	21.55	0.78
6	May 27, 1992	R	B	591.00	279.40	63.20	29.55	13.10	0.74	253.60	8.27	0.08	31.90	20.80	0.93
6	Jan 27, 1993	R	B	582.00	313.70	75.50	30.40	15.70	0.92	267.40	8.18	0.06	31.50	21.67	-
6	Jun 02, 1993	R	B	590.00	304.90	74.40	28.95	17.40	0.80	269.70	8.09	.04<T	35.80	21.90	0.12
7	Dec 21, 1987	R	B	394.00	214.00	46.00	24.00	2.80	0.95	189.30	8.36	0.06	.50<T	14.40	4.50
7	Feb 04, 1988	R	B	454.00	230.00	47.60	27.00	2.40	1.20	240.30	8.32	0.06	.70<T	16.80	89.00
7	May 16, 1988	R	B	461.00	250.00	60.60	23.90	2.80	0.95	245.40	8.31	0.07	.70<T	17.20	0.42
7	Dec 22, 1988	R	B	455.00	255.00	63.00	23.80	3.00	0.95	247.60	8.21	0.08	0.10	18.12	0.49
7	Apr 02, 1990	R	B	481.00	247.00	55.80	26.10	2.40	1.10	230.00	8.30	0.06	.90<T	17.80	.23<T
7	May 22, 1990	U	B	-	241.60	57.30	23.90	2.60	0.81	-	-	0.06	.5<T	24.50	0.41
7	Nov 19, 1990	R	B	467.00	265.70	65.40	24.90	2.50	1.03	244.80	8.04	0.06	.90<T	17.50	0.76
7	Jan 31, 1991	R	B	476.00	272.20	67.70	25.10	3.20	0.98	256.60	8.18	0.06	3.40	18.38	-
7	Jan 31, 1991	T	B	454.00	251.40	60.60	24.25	3.30	0.96	246.70	8.31	0.06	2.00	17.69	-
7	Apr 22, 1991	R	B	449.00	255.80	61.60	24.80	2.30	0.80	243.80	7.98	0.06	.90<T	17.10	0.20
7	Jun 17, 1991	R	B	465.00	199.00	39.80	24.20	2.80	1.05	250.80	8.29	0.08	<.20<W	18.50	0.31
7	Mar 02, 1992	R	B	462.00	257.60	63.20	24.25	2.80	1.00	240.40	8.39	0.06	.70<T	17.87	0.73
7	May 27, 1992	R	B	461.00	259.80	62.40	25.25	2.70	0.84	249.70	8.35	0.06	1.10	17.92	3.90
7	Jan 27, 1993	R	B	442.00	262.60	64.60	24.60	3.60	0.87	240.90	8.28	0.06	.90<T	18.13	0.28
7	Jun 02, 1993	R	B	435.00	250.00	60.70	23.90	2.40	0.89	225.60	8.19	0.06	.80<T	17.94	-
8	Jun 22, 1992	R	B	447.00	216.10	48.30	23.20	2.50	0.97	210.70	8.23	.04<T	1.50	18.73	3.00
8	Jan 25, 1993	R	B	598.00	329.00	99.00	19.75	6.30	1.24	248.50	8.11	0.10	19.30	69.41	0.26
8	Jan 27, 1993	R	B	437.00	257.10	63.90	23.70	3.90	0.86	234.20	8.26	0.06	1.90	19.20	3.02
8	Jun 02, 1993	R	B	434.00	244.00	59.60	23.15	2.90	0.86	221.20	8.18	0.06	1.80	19.09	0.46

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
6	Apr 02, 1990	<5<W	.02<T	-	<.05<W	.05<T	0.50	.005<T	-	.4<T	-	-
6	May 22, 1990	5<T	<.02<W	-	<.05<W	<.05<W	0.65	.005<T	-	3<T	-	-
6	Nov 19, 1990	<5<W	<.02<W	-	<.05<W	.05<T	0.80	<.005<W	-	3<T	-	-
6	Jan 31, 1991	-	<.02<W	-	-	-	0.80	.005<T	-	-	-	-
6	Jan 31, 1991	-	<.02<W	-	-	-	0.80	<.005<W	-	-	-	-
6	Apr 22, 1991	0.00	.02<T	-	.10<T	<.05<W	.05<T	<.005<W	-	0.60	-	-
6	Jun 17, 1991	<5<W	.02<T	-	.10<T	.05<T	0.85	.005<T	-	.4<T	-	-
6	Mar 02, 1992	5<T	<.02<W	-	.10<T	<.05<W	1.15	.005<T	-	0.50	-	-
6	May 27, 1992	<5<W	.02<T	-	.10<T	.05<T	0.95	<.005<W	-	3<T	-	-
6	Jan 27, 1993	<5<W	.02<T	-	.05<T	<.05<W	0.95	<.005<W	-	2<T	-	-
6	Jun 02, 1993	<5<W	<.02<W	-	.05<T	<.05<W	1.10	.005<T	-	0.50	-	-
7	Dec 21, 1987	<5<W	.030<T	-	<.05<W	<.05<W	0.25	<.005<W	-	-	-	-
7	Feb 04, 1988	2.0<T	0.29	-	.10<T	.05<T	0.40	<.005<W	-	.1<T	-	-
7	May 16, 1988	5<T	.02<T	-	.05<T	.10<T	0.30	.005<T	-	3<T	-	-
7	Dec 22, 1988	5<T	.02<T	-	.10<T	.05<T	0.25	.005<T	-	.4<T	-	-
7	Apr 02, 1990	<5<W	.02<T	-	0.35	<.05<W	20<T	.005<T	-	3<T	-	-
7	May 22, 1990	1.5<T	.02<T	-	<.05<W	-	-	-	-	1.10	-	-
7	Nov 19, 1990	<5<W	.02<T	-	<.05<W	<.05<W	.15<T	<.005<W	-	2<T	-	-
7	Jan 31, 1991	-	<.02<W	-	-	-	2<T	<.005<W	-	-	-	-
7	Jan 31, 1991	-	<.02<W	-	-	-	0.25	<.005<W	-	-	-	-
7	Apr 22, 1991	0.50	.02<T	-	.05<T	<.05<W	0.45	<.005<W	-	0.50	-	-
7	Jun 17, 1991	<5<W	.02<T	-	.05<T	.05<T	0.25	.010<T	-	.4<T	-	-
7	Mar 02, 1992	5<T	<.02<W	-	.05<T	<.05<W	.15<T	.005<T	-	3<T	-	-
7	May 27, 1992	<5<W	<.02<W	-	.10<T	.05<T	.10<T	.005<T	-	2<T	-	-
7	Jan 27, 1993	<5<W	.02<T	-	<.05<W	<.05<W	.15<T	<.005<W	-	2<T	-	-
7	Jun 02, 1993	<5<W	<.02<W	-	.05<T	<.05<W	.10<T	.005<T	-	3<T	-	-
8	Jun 22, 1992	<5<W	<.02<W	-	<.05<W	<.05<W	0.40	<.005<W	-	3<T	-	-
8	Jan 25, 1993	1.50	.02<T	-	.10<T	.05<T	0.45	<.005<W	-	1.20	-	-
8	Jan 27, 1993	1.50	.02<T	-	.05<T	<.05<W	0.45	.005<T	-	14.70	-	-
8	Jun 02, 1993	<5<W	<.02<W	-	.05<T	<.05<W	0.40	.005<T	-	3<T	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
9	Feb 24, 1987	T	B	532.00	296.50	-	24.30	5.90	1.27	262.60	7.97	0.16	14.70	21.34	0.20
9	Mar 10, 1987	T	B	554.00	294.50	-	23.50	6.60	1.40	266.60	8.12	0.47	15.50	26.60	0.05
9	Jun 16, 1987	T	B	445.00	270.90	67.00	-	6.60	1.40	240.00	7.42	0.88	9.50	21.00	0.11
9	Aug 18, 1987	T	B	970.00	297.60	70.00	-	11.00	1.50	245.00	7.81	0.42	16.90	27.00	0.40
9	Oct 20, 1987	T	B	813.00	267.00	87.00	-	12.00	2.70	244.40	7.85	0.66	19.30	24.60	0.08
9	Dec 08, 1987	T	B	310.00	255.40	77.00	-	15.00	0.03	251.00	8.18	0.71	16.20	25.00	0.08
9	Jan 17, 1989	T	B	-	-	91.00	-	-	-	-	8.10	-	12.20	-	0.23
9	Feb 06, 1990	T	B	-	-	87.00	-	14.52	-	-	-	0.13	28.40	39.10	0.12
9	Apr 17, 1990	T	B	-	-	-	-	6.50	-	-	-	0.81	30.50	24.10	0.28
9	Jun 12, 1990	T	B	-	-	-	-	6.10	-	-	-	0.55	16.00	24.90	0.85
9	Aug 28, 1990	T	B	-	-	82.00	-	7.40	-	-	-	0.64	18.60	25.20	0.16
9	Sep 24, 1990	T	B	-	-	75.00	-	6.90	-	-	-	0.46	20.40	26.50	0.45
9	Oct 30, 1990	T	B	-	-	-	-	7.98	-	-	-	0.72	23.50	31.60	0.14
9	Nov 26, 1990	T	B	-	-	-	-	7.60	-	-	-	0.56	23.40	26.20	0.14
9	Dec 04, 1990	T	B	389.00	300.00	-	-	7.84	-	261.00	-	0.70	24.00	30.20	0.14
9	Jan 29, 1991	T	B	-	-	-	-	7.21	-	-	-	0.09	23.10	27.40	-
9	Jan 29, 1991	T	B	-	-	-	-	6.86	-	-	-	0.09	22.50	39.90	-
9	Feb 19, 1991	T	B	-	-	90.00	-	6.88	-	-	-	0.88	23.40	29.80	-
9	Feb 19, 1991	T	B	-	-	88.00	-	6.80	-	-	-	0.91	21.10	27.90	-
9	Apr 2, 1991	T	B	-	-	86.00	-	1.34	-	-	-	0.82	20.60	49.60	-
9	Apr 15, 1991	T	B	-	-	94.00	-	7.62	-	-	-	0.57	19.70	20.90	-
9	Apr 15, 1991	T	B	-	-	90.00	-	6.93	-	-	-	0.61	18.80	21.80	-
9	May 06, 1991	T	B	-	-	88.00	-	7.68	-	-	-	0.54	14.20	18.60	-
9	May 06, 1991	T	B	-	-	94.00	-	5.21	-	-	-	0.55	13.90	19.60	-
9	Jun 03, 1991	T	B	-	-	150.00	-	5.83	-	-	-	0.75	12.80	12.70	-
9	Jul 15, 1991	T	B	-	-	68.00	-	4.82	-	-	-	0.71	14.80	10.90	-
9	Aug 19, 1991	T	B	-	-	88.00	-	7.36	-	-	-	0.70	18.40	14.20	-
9	Sep 30, 1991	T	B	-	-	80.00	-	7.40	-	-	-	0.68	16.20	12.20	-
9	Oct 21, 1991	T	B	-	-	94.00	-	7.27	-	-	-	0.38	20.80	13.20	-
9	Nov 18, 1991	T	B	-	-	79.00	-	7.87	-	-	-	0.63	20.90	12.40	-

[illegible]

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
9	Dec 09, 1991	T	B	-	-	87.00	-	9.07	-	-	-	0.39	20.70	15.20	-
9	Jan 20, 1992	T	B	-	-	96.00	-	8.44	-	-	-	0.12	20.70	16.90	-
9	Feb 27, 1992	T	B	-	-	120.00	-	6.91	-	-	-	0.65	24.40	19.40	-
9	Mar 09, 1992	T	B	-	-	83.00	-	9.08	-	-	-	0.30	22.60	20.50	-
9	Apr 27, 1992	T	B	-	-	82.00	-	10.40	-	-	-	0.09	22.60	23.60	-
9	May 05, 1992	T	B	-	-	96.00	-	10.80	-	-	-	0.52	22.90	22.80	-
9	Jun 08, 1992	T	B	-	-	83.00	-	6.97	-	-	-	0.93	16.30	19.30	-
9	Jul 13, 1992	T	B	-	-	87.00	-	6.95	-	-	-	0.58	14.40	16.10	-
9	Aug 03, 1992	T	B	-	-	88.00	-	7.56	-	-	-	0.48	16.00	18.50	-
9	Aug 30, 1992	T	B	-	-	77.00	-	8.19	-	-	-	1.00	17.60	16.90	-
9	Oct 26, 1992	T	B	-	-	90.00	-	9.18	-	-	-	0.79	18.00	20.30	-
9	Nov 16, 1992	T	B	-	-	79.00	-	9.06	-	-	-	0.96	19.10	18.30	-
9	Dec 07, 1992	T	B	-	-	77.00	-	7.51	-	-	-	0.38	18.40	20.20	-
9	Jan 18, 1993	T	B	-	-	94.00	-	7.46	-	-	-	0.69	15.20	19.30	-
9	Feb 08, 1993	T	B	-	-	85.00	-	6.78	-	-	-	0.52	13.50	18.10	-
9	Mar 08, 1993	T	B	-	-	74.00	-	6.43	-	-	-	0.17	12.30	18.40	-
9	Apr 05, 1993	T	B	-	-	74.00	-	6.93	-	-	-	0.65	15.30	18.70	-
9	Nov 01, 1993	T	B	615.00	310.00	78.00	-	8.48	-	260.00	7.67	0.35	20.60	20.90	0.11
10	Feb 24, 1987	T	B	537.00	297.00	-	23.90	5.60	1.25	266.00	7.98	0.15	14.60	21.51	0.34
10	Mar 10, 1987	T	B	550.00	295.00	-	23.50	6.50	1.40	264.70	8.11	0.49	15.50	26.40	0.04
10	Jun 16, 1987	T	B	445.00	270.82	73.00	-	6.30	1.50	236.00	7.81	0.86	14.70	21.60	<.1
10	Aug 18, 1987	T	B	510.00	321.41	75.00	-	9.80	1.50	251.00	7.86	0.44	14.80	27.60	0.55
10	Oct 20, 1987	T	B	424.00	284.00	88.00	-	11.00	1.70	286.00	7.92	0.67	12.10	22.40	0.07
10	Dec 08, 1987	T	B	280.00	262.30	64.00	-	8.30	0.04	240.00	8.17	0.13	14.60	28.20	0.09
10	Jan 05, 1988	T	B	330.00	-	-	-	6.70	-	-	7.75	-	-	-	0.12
10	Feb 23, 1988	T	B	-	-	130.00	-	4.70	-	-	8.04	-	-	-	0.15
10	Apr 25, 1988	T	B	-	-	78.00	-	5.40	-	-	7.72	-	21.80	28.40	0.21
10	Jun 14, 1988	T	B	-	-	82.00	-	7.30	-	-	7.74	-	21.00	24.60	0.15
10	Aug 09, 1988	T	B	-	-	100.00	-	5.90	-	-	8.10	-	16.70	-	0.22
10	Oct 19, 1988	T	B	-	-	76.00	-	8.80	-	-	7.98	-	23.00	21.00	0.11

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
9	Dec 09, 1991	-	-	-	-	-	-	-	-	-	-	-
9	Jan 20, 1992	-	-	-	-	0.01	1.37	0.010	-	-	-	-
9	Feb 27, 1992	-	-	-	-	0.01	1.22	0.010	-	-	-	-
9	Mar 09, 1992	-	-	-	-	0.01	1.31	0.010	-	-	-	-
9	Apr 27, 1992	-	-	-	-	0.01	1.80	0.010	-	-	-	-
9	May 05, 1992	-	-	-	-	0.03	1.37	0.010	-	-	-	-
9	Jun 08, 1992	-	-	-	-	0.03	4.70	0.020	-	-	-	-
9	Jul 13, 1992	-	-	-	-	0.01	2.17	0.010	-	-	-	-
9	Aug 03, 1992	-	-	-	-	0.01	2.33	0.010	-	-	-	-
9	Aug 30, 1992	-	-	-	-	0.01	1.70	0.010	-	-	-	-
9	Oct 26, 1992	-	-	-	-	0.01	1.33	0.010	-	-	-	-
9	Nov 16, 1992	-	-	-	-	0.01	1.69	0.010	-	-	-	-
9	Dec 07, 1992	-	-	-	-	0.01	1.92	0.010	-	-	-	-
9	Jan 18, 1993	-	-	-	-	0.01	3.29	0.010	-	-	-	-
9	Feb 08, 1993	-	-	-	-	0.01	3.68	0.010	-	-	-	-
9	Mar 08, 1993	-	-	-	-	0.01	1.93	0.010	-	-	-	-
9	Apr 05, 1993	-	-	-	-	0.01	2.06	0.010	-	-	-	-
9	Nov 01, 1993	2.50	-	-	0.04	0.01	1.23	0.010	2.0	2.03	-	-
10	Feb 24, 1987	5 < T	<.010<W	.01<T	<.05<W	<.05<W	.15<T	0.140	-	0.70	-	-
10	Mar 10, 1987	5 < T	.020<T	.01<T	<.05<W	<.05<W	1.80	<.005<W	-	0.90	-	-
10	Jun 16, 1987	<2.5	0.30	-	<.05	0.04	-	<.02	-	1.56	576.92	-
10	Aug 16, 1987	2.50	<.02	-	<.05	<.01	2.31	<.02	-	5.53	-	-
10	Oct 20, 1987	<2.5	0.05	-	<.05	<.01	1.46	<.02	-	0.88	328.00	-
10	Dec 06, 1987	<2.5	0.24	-	<.05	<.01	1.64	<.02	-	1.13	322.00	-
10	Jan 05, 1988	-	-	-	-	-	1.58	0.070	-	-	-	-
10	Feb 23, 1988	-	-	-	-	-	1.43	<.02	-	-	-	-
10	Apr 25, 1988	-	-	-	-	0.03	2.11	<.02	-	-	-	-
10	Jun 14, 1988	-	-	-	-	0.09	2.37	<.01	-	-	-	-
10	Aug 09, 1988	-	-	-	-	<.01	4.68	<.02	-	-	-	-
10	Oct 19, 1988	-	-	-	-	<.01	0.87	<.02	-	-	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
10	Jan 17, 1989	T	B	-	-	90.00	-	-	-	-	7.90	-	12.90	59.10	0.24
10	Feb 06, 1990	T	B	-	-	75.00	-	11.58	-	-	-	1.30	25.80	36.00	0.11
10	Apr 17, 1990	T	B	-	-	-	-	6.70	-	-	-	0.79	28.40	22.00	0.14
10	Jun 12, 1990	T	B	-	-	-	-	5.60	-	-	-	0.54	15.90	24.40	1.10
10	Aug 28, 1990	T	B	-	-	81.00	-	7.20	-	-	-	0.63	19.70	24.50	0.18
10	Sep 24, 1990	T	B	-	-	74.00	-	6.86	-	-	-	0.47	20.20	26.50	0.15
10	Oct 30, 1990	T	B	-	-	-	-	7.60	-	-	-	0.71	23.20	29.20	0.25
10	Nov 26, 1990	T	B	-	-	-	-	7.60	-	-	-	0.52	26.10	29.60	0.19
10	Dec 04, 1990	T	B	530.00	300.00	-	-	7.53	-	259.00	-	0.72	24.00	40.90	0.20
10	Jun 03, 1991	T	B	-	-	89.00	-	7.76	-	-	-	0.80	13.80	10.50	-
10	Jul 15, 1991	T	B	-	-	83.00	-	5.40	-	-	-	0.74	13.80	13.30	-
10	Aug 19, 1991	T	B	-	-	84.00	-	7.12	-	-	-	0.72	19.50	13.40	-
11	Feb 24, 1987	T	B	535.00	296.50	-	24.20	5.30	1.46	265.20	7.94	0.56	13.30	21.68	0.19
11	Mar 10, 1987	T	B	553.00	294.50	-	24.10	6.20	1.35	267.30	8.00	0.47	14.70	26.90	0.03
11	Jun 16, 1987	T	B	547.00	351.53	83.00	-	5.20	1.30	253.00	7.04	1.50	6.20	24.00	0.10
11	Aug 18, 1987	T	B	580.00	305.54	90.00	-	8.20	1.30	241.00	7.42	0.83	11.70	76.40	0.15
11	Oct 20, 1987	T	B	420.00	266.50	91.00	-	4.60	1.80	280.00	7.58	0.42	4.10	30.00	0.22
11	Dec 08, 1987	T	B	290.00	302.70	82.00	-	2.80	0.48	224.00	7.80	0.68	4.60	39.20	0.22
11	Jan 05, 1988	T	B	366.00	-	-	-	5.10	-	-	7.40	-	-	-	0.04
11	Feb 23, 1988	T	B	-	-	140.00	-	4.70	-	-	7.99	-	-	-	0.13
11	Apr 25, 1988	T	B	-	-	110.00	-	3.60	-	-	7.45	-	15.40	-	0.24
11	Jun 14, 1988	T	B	-	-	96.00	-	4.40	-	-	7.41	-	17.60	64.80	0.12
11	Aug 09, 1988	T	B	-	-	98.00	-	4.50	-	-	7.78	-	16.20	64.60	0.10
11	Oct 19, 1988	T	B	-	-	94.00	-	5.70	-	-	7.87	-	19.50	73.00	0.14
11	Jan 17, 1989	T	B	-	-	85.00	-	-	-	-	7.67	-	12.60	73.60	0.30
11	Feb 06, 1990	T	B	-	-	82.00	-	12.54	-	-	-	0.34	20.40	63.70	0.11
11	Apr 17, 1990	T	B	-	-	-	-	5.50	-	-	-	0.83	32.80	62.60	0.13
11	Jun 12, 1990	T	B	-	-	-	-	3.40	-	-	-	1.50	12.40	59.00	1.20
11	Aug 28, 1990	T	B	-	-	96.00	-	4.00	-	-	-	0.70	14.80	62.30	0.19
11	Sep 24, 1990	T	B	-	-	92.00	-	4.14	-	-	-	0.85	15.50	67.50	0.30

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
10	Jan 17, 1989	-	-	-	-	<.01	2.72	<.02	-	-	-	-
10	Feb 06, 1990	-	-	-	-	0.05	2.27	0.020	-	-	-	-
10	Apr 17, 1990	-	-	-	-	-	-	-	-	-	-	-
10	Jun 12, 1990	-	-	-	-	-	-	-	-	-	-	-
10	Aug 28, 1990	-	-	-	-	-	-	-	-	-	-	-
10	Sep 24, 1990	-	-	-	-	-	-	-	-	-	-	-
10	Oct 30, 1990	-	-	-	-	-	-	-	-	-	-	-
10	Nov 26, 1990	-	-	-	-	-	-	-	-	-	-	-
10	Dec 04, 1990	2.50	-	-	-	-	-	-	-	-	-	-
10	Jun 03, 1991	-	-	-	-	0.01	4.35	0.010	-	-	-	-
10	Jul 15, 1991	-	-	-	-	0.01	2.84	0.010	-	-	-	-
10	Aug 19, 1991	-	-	-	-	0.01	2.10	0.010	-	-	-	-
11	Feb 24, 1987	1.0<T	<.010<W	.01<T	<.05<W	<.05<W	.15<T	0.140	-	0.70	-	-
11	Mar 10, 1987	5<T	.020<T	.02<T	<.05<W	<.05<W	1.75	<.005<W	-	0.90	-	-
11	Jun 16, 1987	<2.5	0.33	-	0.05	<.01	1.85	<.02	-	1.75	555.56	-
11	Aug 18, 1987	2.50	<.02	-	<.05	<.01	1.98	<.02	-	1.34	-	-
11	Oct 20, 1987	<2.5	0.02	-	<.05	<.01	1.37	<.02	-	0.94	308.00	-
11	Dec 08, 1987	<2.5	0.25	-	0.16	<.01	1.51	<.02	-	1.43	327.60	-
11	Jan 05, 1988	-	-	-	-	-	1.51	<.02	-	-	-	-
11	Feb 23, 1988	-	-	-	-	-	1.38	<.02	-	-	-	-
11	Apr 25, 1988	-	-	-	-	<.01	1.42	<.02	-	-	-	-
11	Jun 14, 1988	-	-	-	-	0.24	3.35	<.001	-	-	-	-
11	Aug 09, 1988	-	-	-	-	<.01	2.14	<.02	-	-	-	-
11	Oct 19, 1988	-	-	-	-	<.01	0.61	<.02	-	-	-	-
11	Jan 17, 1989	-	-	-	-	<.01	2.61	<.02	-	-	-	-
11	Feb 06, 1990	-	-	-	-	0.05	1.99	0.020	-	-	-	-
11	Apr 17, 1990	-	-	-	-	-	-	-	-	-	-	-
11	Jun 12, 1990	-	-	-	-	-	-	-	-	-	-	-
11	Aug 28, 1990	-	-	-	-	-	-	-	-	-	-	-
11	Sep 24, 1990	-	-	-	-	-	-	-	-	-	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)	
11	Oct 30, 1990	T	B	-	-	-	-	5.07	-	-	-	-	0.57	15.10	68.60	0.14
11	Nov 26, 1990	T	B	-	-	-	-	5.11	-	-	-	-	0.54	17.90	63.50	0.11
11	Dec 04, 1990	T	B	578.00	350.00	-	-	4.90	-	274.00	-	-	0.52	19.80	62.20	0.17
11	Jan 29, 1991	T	B	-	-	-	-	4.58	-	-	-	-	0.40	15.40	69.50	-
11	Feb 19, 1991	T	B	-	-	91.00	-	5.85	-	-	-	-	0.81	16.20	73.70	-
11	Apr 02, 1991	T	B	-	-	98.00	-	1.34	-	-	-	-	1.20	17.50	50.30	-
11	Apr 15, 1991	T	B	-	-	92.00	-	3.71	-	-	-	-	0.79	8.10	29.40	-
11	May 06, 1991	T	B	-	-	90.00	-	2.67	-	-	-	-	0.69	6.20	31.60	-
11	Jun 03, 1991	T	B	-	-	160.00	-	8.61	-	-	-	-	1.00	8.61	30.00	-
11	Jul 15, 1991	T	B	-	-	110.00	-	4.19	-	-	-	-	0.29	9.20	38.70	-
11	Aug 19, 1991	T	B	-	-	110.00	-	5.32	-	-	-	-	0.09	10.80	38.70	-
11	Sep 30, 1991	T	B	-	-	92.00	-	4.34	-	-	-	-	0.53	8.40	37.70	-
11	Oct 21, 1991	T	B	-	-	98.00	-	4.24	-	-	-	-	0.70	16.40	37.20	-
11	Nov 18, 1991	T	B	-	-	88.00	-	4.26	-	-	-	-	1.20	10.30	34.70	-
11	Dec 09, 1991	T	B	-	-	95.00	-	4.93	-	-	-	-	0.65	11.00	50.30	-
11	Jan 20, 1992	T	B	-	-	99.00	-	3.54	-	-	-	-	1.10	4.90	28.80	-
11	Feb 17, 1992	T	B	-	-	100.00	-	3.31	-	-	-	-	0.73	13.10	52.60	-
11	Mar 09, 1992	T	B	-	-	110.00	-	5.23	-	-	-	-	0.87	14.40	75.60	-
11	Apr 27, 1992	T	B	-	-	82.00	-	3.25	-	-	-	-	0.75	6.50	33.50	-
11	May 04, 1992	T	B	-	-	100.00	-	4.92	-	-	-	-	1.10	10.40	45.20	-
11	Jun 08, 1992	T	B	-	-	94.00	-	4.67	-	-	-	-	1.10	11.70	62.90	-
11	Jul 13, 1992	T	B	-	-	88.00	-	3.12	-	-	-	-	0.47	6.50	29.70	-
11	Aug 03, 1992	T	B	-	-	95.00	-	3.00	-	-	-	-	0.35	5.00	30.10	-
11	Aug 30, 1992	T	B	-	-	81.00	-	4.20	-	-	-	-	1.10	9.60	21.90	-
11	Oct 26, 1992	T	B	-	-	98.00	-	5.63	-	-	-	-	1.20	10.20	43.10	-
11	Nov 16, 1992	T	B	-	-	82.00	-	4.06	-	-	-	-	1.20	7.60	29.60	-
11	Dec 07, 1992	T	B	-	-	83.00	-	4.36	-	-	-	-	0.80	11.10	30.90	-
11	Jan 18, 1993	T	B	-	-	99.00	-	4.96	-	-	-	-	1.10	11.40	32.40	-
11	Feb 08, 1993	T	B	-	-	89.00	-	4.77	-	-	-	-	0.70	10.10	23.50	-
11	Mar 08, 1993	T	B	-	-	88.00	-	5.27	-	-	-	-	0.98	12.40	39.70	-

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
11	Oct 30, 1990	-	-	-	-	-	-	-	-	-	-	-
11	Nov 26, 1990	-	-	-	-	-	-	-	-	-	-	-
11	Dec 04, 1990	2.50	-	-	-	-	-	-	-	-	-	-
11	Jan 29, 1991	-	-	-	-	0.05	1.30	0.020	-	-	-	-
11	Feb 19, 1991	-	-	-	-	0.05	1.30	0.010	-	-	-	-
11	Apr 02, 1991	-	-	-	-	0.05	1.50	0.010	-	-	-	-
11	Apr 15, 1991	-	-	-	-	0.05	1.70	0.010	-	-	-	-
11	May 06, 1991	-	-	-	-	0.05	2.00	0.010	-	-	-	-
11	Jun 03, 1991	-	-	-	-	0.01	2.07	0.010	-	-	-	-
11	Jul 15, 1991	-	-	-	-	0.01	1.73	0.010	-	-	-	-
11	Aug 19, 1991	-	-	-	-	0.01	1.70	0.010	-	-	-	-
11	Sep 30, 1991	-	-	-	-	0.19	1.64	0.010	-	-	-	-
11	Oct 21, 1991	-	-	-	-	0.01	1.17	0.010	-	-	-	-
11	Nov 18, 1991	-	-	-	-	0.01	0.73	0.010	-	-	-	-
11	Dec 09, 1991	-	-	-	-	0.01	0.38	0.010	-	-	-	-
11	Jan 20, 1992	-	-	-	-	0.05	0.54	0.010	-	-	-	-
11	Feb 17, 1992	-	-	-	-	0.01	1.09	0.010	-	-	-	-
11	Mar 09, 1992	-	-	-	-	0.01	0.99	0.010	-	-	-	-
11	Apr 27, 1992	-	-	-	-	0.01	1.50	0.010	-	-	-	-
11	May 04, 1992	-	-	-	-	0.03	2.26	0.010	-	-	-	-
11	Jun 08, 1992	-	-	-	-	0.02	1.68	0.020	-	-	-	-
11	Jul 13, 1992	-	-	-	-	0.01	1.63	0.010	-	-	-	-
11	Aug 03, 1992	-	-	-	-	0.01	1.91	0.010	-	-	-	-
11	Aug 30, 1992	-	-	-	-	0.01	1.64	0.010	-	-	-	-
11	Oct 26, 1992	-	-	-	-	0.01	1.20	0.010	-	-	-	-
11	Nov 16, 1992	-	-	-	-	0.01	1.55	0.010	-	-	-	-
11	Dec 07, 1992	-	-	-	-	0.01	1.50	0.010	-	-	-	-
11	Jan 18, 1993	-	-	-	-	0.01	1.92	0.010	-	-	-	-
11	Feb 08, 1993	-	-	-	-	0.01	2.50	0.010	-	-	-	-
11	Mar 08, 1993	-	-	-	-	0.01	1.61	0.010	-	-	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
--------	--------------	-------------	-------------	-------------------------------	-------------------	----	----	----	---	-----------------	----	---	----	-----	-------------

11	Apr 05, 1993	T	B	-	-	83.00	-	4.65	-	-	-	0.90	11.60	45.40	-
11	Nov 01, 1993	T	B	636.00	340.00	86.00	-	4.81	-	262.00	7.47	0.57	11.70	52.10	0.15
12	Feb 24, 1987	R	B	997.00	401.00	-	34.60	76.80	3.24	334.30	7.77	0.10	129.00	49.62	0.15
12	Mar 10, 1987	R	B	999.00	386.50	-	33.20	70.20	2.95	332.80	7.80	0.10	120.00	55.30	0.12
12	Jun 16, 1987	R	B	886.00	398.28	85.00	-	55.00	3.70	320.00	7.02	0.11	128.80	56.80	0.12
12	Aug 18, 1987	R	B	770.00	361.09	91.00	-	64.00	2.10	275.00	7.65	0.09	122.70	55.40	0.12
12	Oct 20, 1987	R	B	-	379.70	110.00	-	68.00	3.50	318.80	7.38	0.08	-	57.40	0.09
12	Dec 08, 1987	R	B	610.00	425.90	96.00	-	62.00	0.05	331.00	7.61	0.09	103.00	56.80	0.15
12	Jan 17, 1989	R	B	-	-	96.00	-	-	-	-	7.21	-	120.30	49.80	0.30
12	Apr 17, 1990	R	B	-	-	-	-	29.00	-	-	-	0.10	173.00	51.20	0.15
12	Jul 15, 1991	R	B	-	-	120.00	-	84.10	-	-	-	0.09	151.00	37.00	-
12	Aug 19, 1991	R	B	-	-	98.00	-	5.13	-	-	-	0.10	143.00	39.70	-
13	Mar 10, 1987	R	B	639.00	327.00	-	29.30	13.70	0.90	276.40	8.09	0.09	35.30	46.80	0.03
13	Jun 16, 1987	R	B	507.00	349.98	81.00	-	4.90	1.30	260.00	7.06	1.00	5.10	63.40	0.13
13	Aug 18, 1987	R	B	620.00	318.43	75.00	-	13.00	0.88	254.00	7.34	0.10	36.30	56.00	0.45
13	Oct 20, 1987	R	B	420.00	275.20	90.00	-	8.60	2.00	250.00	7.59	0.73	14.70	35.60	0.98
13	Dec 08, 1987	R	B	430.00	316.50	80.00	-	9.40	0.80	266.00	7.78	0.10	34.60	40.00	0.22
13	Jan 05, 1988	R	B	615.00	-	-	-	5.20	-	-	7.32	-	-	-	0.11
13	Feb 23, 1988	R	B	-	-	130.00	-	4.60	-	-	7.72	-	-	-	0.76
13	Apr 25, 1988	R	B	-	-	90.00	-	10.00	-	-	7.43	-	43.50	58.40	0.38
13	Jun 14, 1988	R	B	-	-	89.00	-	8.50	-	-	7.37	-	-	56.80	0.17
13	Aug 09, 1988	R	B	-	-	91.00	-	19.00	-	-	7.87	-	47.50	48.00	0.31
13	Oct 19, 1988	R	B	-	-	87.00	-	20.00	-	-	7.79	-	49.20	46.00	2.80
13	Jan 17, 1989	R	B	-	-	73.00	-	-	-	-	7.53	-	43.10	48.80	0.39
13	Apr 17, 1990	R	B	-	-	-	-	14.00	-	-	-	0.25	65.40	52.30	4.50
13	Aug 28, 1990	R	B	-	-	1.20	-	1.34	-	-	-	0.05	2.60	3.10	0.11
14	Jun 01, 1987	R	B	807.00	347.00	102.00	22.60	25.00	1.30	231.80	8.09	-	37.50	146.00	-
14	Jun 01, 1987	T	B	805.00	382.00	102.00	31.10	25.00	1.45	230.50	8.15	-	38.00	149.00	-
14	Jul 02, 1987	R	B	743.00	356.00	93.00	30.00	21.40	1.40	227.00	8.09	-	30.50	132.00	-
14	Jul 02, 1987	T	B	761.00	368.00	96.40	30.90	22.40	1.60	225.60	8.12	-	32.00	144.00	-

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
11	Apr 05, 1993	-	-	-	-	0.02	1.94	0.010	-	-	-	-
11	Nov 01, 1993	2.50	-	-	0.06	0.01	1.07	0.010	2.0	2.09	-	-
12	Feb 24, 1987	2.5<T	<.010<W	.02<T	<.05<W	<.05<W	.10<T	0.130	-	0.90	-	-
12	Mar 10, 1987	5<T	<.010<W	<.01<W	<.05<W	<.05<W	0.65	<.005<W	-	1.10	-	-
12	Jun 16, 1987	<2.5	0.42	-	0.05	<.01	2.12	<.02	-	2.14	561.22	-
12	Aug 18, 1987	2.50	<.02	-	<.05	<.01	2.43	<.02	-	0.38	-	-
12	Oct 20, 1987	<2.5	0.09	-	<.05	<.01	1.42	<.02	-	1.50	536.00	-
12	Dec 08, 1987	<2.5	<.02	-	<.05	<.01	0.93	<.02	-	0.64	588.00	-
12	Jan 17, 1989	-	-	-	-	<.01	1.63	<.02	-	-	-	-
12	Apr 17, 1990	-	-	-	-	-	1.09	0.020	-	-	-	-
12	Jul 15, 1991	-	-	-	-	0.01	0.74	0.010	-	-	-	-
12	Aug 19, 1991	-	-	-	-	0.01	0.60	0.010	-	-	-	-
13	Mar 10, 1987	1.0<T	<.010<W	0.08	<.05<W	.05<T	.20<T	<.005<W	-	0.70	-	-
13	Jun 16, 1987	<2.5	0.28	-	0.05	<.01	0.90	<.02	-	3.22	471.70	-
13	Aug 18, 1987	2.50	<.02	-	<.05	<.01	0.44	<.02	-	1.78	466.70	-
13	Oct 20, 1987	<2.5	0.02	-	<.05	<.01	1.32	<.02	-	0.59	340.80	-
13	Dec 08, 1987	<2.5	<.02	-	<.05	<.01	0.26	<.02	-	1.21	397.20	-
13	Jan 05, 1988	-	-	-	-	-	0.89	<.02	-	-	-	-
13	Feb 23, 1988	-	-	-	-	-	1.45	<.02	-	-	-	-
13	Apr 25, 1988	-	-	-	-	0.02	0.02	<.02	-	-	-	-
13	Jun 14, 1988	-	-	-	-	0.27	1.07	<.001	-	-	-	-
13	Aug 09, 1988	-	-	-	-	<.01	0.28	<.02	-	-	-	-
13	Oct 19, 1988	-	-	-	-	<.01	<.2	<.02	-	-	-	-
13	Jan 17, 1989	-	-	-	-	<.01	<.2	<.02	-	-	-	-
13	Apr 17, 1990	-	-	-	-	-	0.78	0.020	-	-	-	-
13	Aug 28, 1990	-	-	-	-	-	-	-	-	-	-	-
14	Jun 01, 1987	-	-	-	-	0.10	-	0.050	-	-	-	-
14	Jun 01, 1987	-	-	-	-	0.05	-	0.050	-	-	-	-
14	Jul 02, 1987	-	-	-	-	0.05	0.10	0.025	-	-	-	-
14	Jul 02, 1987	-	-	-	-	0.05	0.15	0.025	-	-	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
--------	-----------------	----------------	----------------	----------------------------------	----------------------	----	----	----	---	--------------------	----	---	----	-----	----------------

14	Nov 26, 1990	R	B	819.00	369.00	97.00	30.80	32.70	-	239.90	8.20	0.22	55.90	113.75	0.54
14	Nov 26, 1990	T	B	842.00	379.00	100.30	31.40	35.10	-	240.10	8.25	0.22	59.90	123.20	0.82
14	Jun 09, 1992	T	B	580.00	322.00	86.20	25.90	5.76	1.19	208.30	8.22	0.20	5.00	106.21	0.94
15	Jan 31, 1986	R	B	727.00	372.00	98.00	31.00	13.50	1.45	195.00	7.84	-	11.60	184.00	-
16	Jan 1992	R	B	-	393.00	111.00	28.10	5.26	1.80	207.00	7.75	0.30	2.50	179.00	1.00
17	Jan 29, 1991	R	B	725.00	326.50	91.80	23.65	27.60	1.34	268.20	7.95	.14	50.40	50.79	1.70
17	Nov 02, 1992	T	B	468.00	219.40	55.30	19.70	9.72	9.60	185.30	8.33	1.10	5.30	51.91	24<T
17	June 1993	R	B	800.00	345.00	-	-	25.50	-	253.00	7.60	-	36.90	-	0.15
18	June 1993	R	B	500.00	305.00	-	-	7.60	-	200.00	7.70	-	5.40	-	0.00
19	Jul 25, 1985	R	B	598.00	296.00	-	-	10.00	1.10	240.20	7.58	-	24.80	33.50	-
19	Jun 15, 1987	R	B	598.00	302.00	79.40	25.30	9.00	1.15	245.80	8.02	-	18.00	48.80	-
19	Jul 07, 1987	R	B	598.00	308.00	81.40	25.40	8.40	1.15	245.00	8.07	-	18.50	49.30	-
19	Mar 05, 1991	R	B	685.00	307.00	81.30	25.20	12.70	1.10	240.00	7.80	-	31.00	45.00	0.60
19	Mar 1992	R	B	640.00	298.00	79.60	24.20	14.90	1.00	257.00	8.09	0.40	33.70	48.30	0.80
19	Sep 08, 1992	R	B	615.00	310.48	81.10	26.22	12.71	1.25	255.10	8.35	0.20	24.50	49.96	0.43
19	Nov 02, 1992	R	B	596.00	293.00	75.70	25.30	11.93	1.23	241.10	8.22	0.22	24.60	50.51	0.63
19	Feb 02, 1993	R	B	596.00	308.00	82.00	25.10	11.57	1.21	257.50	8.31	0.20	24.20	48.31	0.81
19	Aug 10, 1993	R	B	594.00	287.70	75.80	23.90	11.10	1.19	249.10	8.12	0.22	14.60	48.31	0.73
20	Sep 21, 1983	R	B	568.00	311.10	80.50	26.80	4.00	1.00	253.40	7.50	0.15	5.80	51.00	3.40
20	Jun 07, 1984	R	B	322.00	171.80	35.00	20.50	3.60	1.60	171.80	8.04	-	2.20	1.50	-
20	Jul 25, 1985	R	B	480.00	292.00	-	-	3.80	1.10	243.80	7.68	-	6.00	54.00	-
20	Jun 15, 1987	R	B	536.00	285.00	73.80	24.60	2.80	1.10	246.00	8.07	-	4.50	43.70	-
20	Jul 07, 1987	R	B	533.00	291.00	76.00	24.50	3.00	1.05	244.30	8.12	-	4.50	44.40	-
20	Mar 05, 1991	R	B	643.00	312.00	80.50	27.10	5.10	1.20	260.00	7.70	-	13.00	62.00	2.50
20	Mar 1992	R	B	620.00	317.00	84.90	25.40	5.47	1.00	267.00	8.02	0.30	16.90	56.50	5.20
20	Sep 08, 1992	R	B	575.00	313.09	80.90	27.00	5.08	1.20	254.70	8.24	0.16	12.10	55.05	4.20
20	Nov 02, 1992	R	B	556.00	293.00	74.50	26.00	4.71	1.21	247.60	8.23	0.14	11.60	53.42	3.80
20	Feb 01, 1993	R	B	580.00	321.00	85.30	26.90	5.12	1.21	269.30	8.29	0.14	12.90	56.33	4.14
20	Aug 10, 1993	R	B	601.00	308.40	79.30	26.80	5.59	1.24	269.10	8.13	0.14	5.10	57.62	4.30
21	Sep 21, 1983	R	B	765.00	418.50	115.00	32.00	11.00	1.55	254.00	7.29	0.16	21.40	90.50	16.00

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
14	Nov 26, 1990	<5 <W	.002 <T	.0005 <T	0.13	.002 <T	.020 <T	.0030 <T	3.6	0.50	-	-
14	Nov 26, 1990	9.00	<.002 <W	.0005 <T	.070 <T	<.002 <W	0.03	.0020 <T	<2 <W	0.50	-	-
14	Jun 09, 1992	.5 <T	<.002 <W	.001 <T	.020 <T	<.002 <W	0.18	<.0010 <W	<2 <W	0.50	-	-
15	Jan 31, 1986	-	-	-	<.10 <W	<.05 <W	.10 <T	<.005 <W	-	-	-	-
16	Jan 1992	3.00	<0.06	-	-	-	<0.03	<0.03	<2	-	536.00	0.27
17	Jan 29, 1991	1.5 <T	<.002 <W	.0020 <T	.080 <T	.006 <T	3.92	<.0010 <W	.4 <T	0.70	-	-
17	Nov 02, 1992	.5 <T	.006 <T	.001 <T	.040 <T	.002 <T	0.85	<.0010 <W	<2 <W	0.50	-	-
17	June 1993	0.60	-	-	-	-	-	-	-	-	-	-
18	June 1993	0.60	-	-	-	-	-	-	-	-	-	-
19	Jul 25, 1985	-	-	-	.20 <T	-	2.60	-	.6 <T	0.60	-	-
19	Jun 15, 1987	-	-	-	-	0.10	0.60	0.035	-	-	-	-
19	Jul 07, 1987	-	-	-	-	0.10	1.15	0.010	-	-	-	-
19	Mar 05, 1991	<3.0	-	-	-	<0.05	0.93	-	-	-	-	-
19	Mar 1992	6.00	<.4	<0.005	<0.1	<0.05	1.60	0.100	<2	0.60	525.00	-
19	Sep 08, 1992	1.0 <T	<.002 <W	.0015 <T	.050 <T	0.01	1.76	.0010 <T	.8 <T	2 <T	-	-
19	Nov 02, 1992	1.0 <T	.005 <T	<.0010 <W	.090 <T	0.01	1.72	.0030 <T	<2 <W	.4 <T	-	-
19	Feb 02, 1993	1.0 <T	.002 <T	.0020 <T	.080 <T	0.02	1.86	.0030 <T	<2 <W	.4 <T	-	-
19	Aug 10, 1993	.8 <T	.006 <T	.0020 <T	.080 <T	0.02	1.80	.0020 <T	<2 <W	0.50	-	-
20	Sep 21, 1983	11.90	-	.02 <W	0.10	.1 <W	.1 <T	.01 <T	-	0.50	-	-
20	Jun 07, 1984	-	-	-	.10 <W	.05 <W	.05 <W	.005 <W	-	-	-	-
20	Jul 25, 1985	-	-	-	.20 <T	<.005 <W	-	-	.6 <T	0.60	-	-
20	Jun 15, 1987	-	-	-	-	0.10	0.05	0.010	-	-	-	-
20	Jul 07, 1987	-	-	-	-	0.10	0.10	0.005	-	-	-	-
20	Mar 05, 1991	7.00	-	-	-	<0.05	<0.05	-	-	-	-	-
20	Mar 1992	5.00	<.4	<0.005	<0.1	<0.05	<0.1	<0.1	<0.002	0.60	520.00	-
20	Sep 08, 1992	3.50	<.002 <W	.0020 <T	.040 <T	0.03	<.005 <W	.0010 <T	1.0 <T	2 <T	-	-
20	Nov 02, 1992	2.00	.003 <T	.0020 <T	.070 <T	0.03	<.005 <W	.0020 <T	<2 <W	0.60	-	-
20	Feb 01, 1993	1.50	.005 <T	.0020 <T	0.12	0.04	.015 <T	0.006	<2 <W	0.50	-	-
20	Aug 10, 1993	2.80	.008 <T	.0030 <T	.080 <T	0.03	.010 <T	.0020 <T	.6 <T	0.60	-	-
21	Sep 21, 1983	30.20	-	.02 <W	0.20	.1 <T	.1 <W	.01 <T	-	1.30	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
21	Jun 07, 1984	R	B	820.00	460.30	125.00	36.00	18.10	1.85	310.20	7.26	-	44.00	120.00	-
21	Jul 25, 1985	R	B	850.00	456.00	-	-	23.50	1.80	315.20	7.23	-	54.20	122.00	-
21	Jun 15, 1987	R	B	914.00	438.00	117.00	35.50	25.80	2.00	323.80	7.76	-	55.00	100.90	-
21	Jul 07, 1987	R	B	882.00	441.00	119.00	34.90	23.80	2.00	314.60	7.91	-	52.50	94.60	-
21	Mar 05, 1991	R	B	896.00	406.00	109.00	32.50	18.10	1.80	300.00	7.20	-	44.00	87.00	8.70
21	Mar 1992	R	B	846.00	374.00	99.40	30.60	22.90	1.51	279.00	8.09	0.40	58.40	81.90	5.30
21	Aug 19, 1992	R	B	818.00	413.76	110.46	33.40	21.64	1.92	297.00	8.07	0.18	46.00	86.74	8.90
21	Oct 05, 1992	R	B	740.00	398.00	104.80	33.10	17.50	1.85	296.80	8.09	0.16	37.80	78.34	8.60
21	Dec 07, 1992	R	B	530.00	220.59	54.40	20.58	15.40	1.75	131.00	8.13	0.20	32.40	87.66	10.30
21	May 03, 1993	R	B	812.00	392.27	107.95	29.82	27.42	1.81	314.90	8.21	0.14	55.10	72.21	6.04
22	Sep 21, 1993	R	B	625.00	356.00	97.00	27.70	3.50	0.95	248.20	7.56	0.13	2.40	88.00	3.20
22	Jun 07, 1984	R	B	570.00	284.90	77.00	22.50	14.30	1.30	235.60	7.77	-	31.20	26.00	-
22	Jul 25, 1985	R	B	553.00	320.00	-	-	3.00	1.10	248.00	7.57	-	2.00	78.00	-
22	Jun 15, 1987	R	B	596.00	309.00	83.80	24.30	3.60	1.05	260.10	8.09	-	5.00	64.10	-
22	Jul 07, 1987	R	B	590.00	325.00	88.80	24.90	3.20	1.05	254.10	8.07	-	5.00	67.70	-
22	Mar 05, 1991	R	B	599.00	297.00	79.30	24.20	4.00	1.00	260.00	7.40	-	7.90	55.00	2.70
22	Mar 1992	R	B	610.00	315.00	86.90	23.70	5.30	1.00	257.00	8.17	0.30	11.00	74.20	1.20
22	Aug 19, 1992	R	B	623.00	349.00	96.54	26.16	5.24	1.20	253.70	8.21	0.14	11.00	77.80	1.90
22	Oct 05, 1992	R	B	607.00	345.00	95.70	25.90	5.27	1.18	256.40	8.15	0.12	12.00	79.90	1.83
22	Dec 07, 1992	R	B	461.00	189.63	50.80	15.24	5.48	1.17	108.10	8.15	0.14	12.60	82.67	2.50
22	May 03, 1993	R	B	631.00	342.60	94.40	25.98	5.37	1.20	262.30	8.20	0.12	11.60	85.38	2.83
23	May 01, 1987	R	B	499.00	272.00	63.60	22.00	4.30	0.37	231.00	7.78	0.20	3.59	44.40	2.20
23	Mar 05, 1991	R	B	542.00	270.00	68.00	24.40	2.80	1.00	240.00	7.50	-	4.60	45.00	3.00
23	Mar 1992	R	B	534.00	268.00	69.00	23.20	3.71	1.00	243.00	8.01	0.30	5.46	44.90	2.10
23	Sep 08, 1992	R	B	508.00	271.65	68.35	24.54	3.41	1.11	237.00	8.35	0.18	5.60	45.45	3.60
23	Nov 02, 1992	R	B	495.00	263.00	65.60	24.20	3.23	1.09	231.20	8.25	0.16	5.40	44.13	3.20
23	Feb 01, 1993	R	B	503.00	279.00	71.50	24.40	3.21	1.07	245.00	8.33	0.16	5.30	43.98	3.97
23	Aug 10, 1993	R	B	510.00	278.20	71.50	23.90	3.21	1.06	242.90	8.13	0.16	8.00	42.19	3.67
24	May 17, 1991	R	B	528.00	258.00	65.20	23.10	2.70	1.00	230.00	7.90	-	2.80	31.00	2.20
24	Mar 1992	R	B	501.00	257.00	65.90	22.40	3.21	1.00	240.00	8.11	0.30	4.47	29.40	2.40

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
21	Jun 07, 1984	-	-	-	.10<W	.05<W	.05<W	.010<T	-	-	-	-
21	Jul 25, 1985	-	-	-	.20<T	-	<.05<W	-	1.0<T	1.20	-	-
21	Jun 15, 1987	-	-	-	-	0.10	0.05	0.005	-	-	-	-
21	Jul 07, 1987	-	-	-	-	0.10	0.10	0.005	-	-	-	-
21	Mar 05, 1991	14.00	-	-	-	<.005	<.005	-	-	-	-	-
21	Mar 1992	6.00	<.4	<.0005	0.10	<.005	<.01	<.01	<.2	1.20	640.00	-
21	Aug 19, 1992	1.0<T	<.0002<W	.0010<T	0.13	0.05	<.005<W	.0030<T	<.2<W	1.10	-	-
21	Oct 05, 1992	2.50	<.0002<W	.0015<T	0.11	0.06	<.005<W	.0030<T	.4<T	0.90	-	-
21	Dec 07, 1992	2.00	.003<T	.0015<T	0.12	0.07	<.005<W	.0020<T	<.2<W	0.90	-	-
21	May 03, 1993	4.00	.0002<W	<.0001<W	0.16	0.05	0.03	.004<T	.6<T	1.20	-	-
22	Sep 21, 1993	7.50	-	.02<W	0.10	.1<W	.1<T	.01<T	-	0.50	-	-
22	Jun 07, 1984	-	-	-	.10<W	.05<W	4.10	.010<T	-	-	-	-
22	Jul 25, 1985	-	-	-	<.10<W	-	<.05<W	-	.8<T	0.60	-	-
22	Jun 15, 1987	-	-	-	-	0.05	0.05	0.005	-	-	-	-
22	Jul 07, 1987	-	-	-	-	0.10	0.15	0.005	-	-	-	-
22	Mar 05, 1991	6.00	-	-	-	<.005	<.005	-	-	-	-	-
22	Mar 1992	6.00	<.4	<.0005	<.01	<.01	<.01	<.01	<.2	1.00	518.00	-
22	Aug 19, 1992	1.50	<.0002<W	.0010<T	.060<T	0.01	.015<T	.0030<T	.4<T	0.70	-	-
22	Oct 05, 1992	3.00	.004<T	.0015<T	.060<T	0.01	0.03	.0030<T	<.2<W	1.10	-	-
22	Dec 07, 1992	2.00	.004<T	<.0010<W	.080<T	0.02	0.03	.0020<T	<.2<W	0.90	-	-
22	May 03, 1993	3.50	<.0002<W	<.0010<W	.080<T	0.02	0.03	.0040<T	<.2<W	0.70	-	-
23	May 01, 1987	5.00	<.0005	-	<.01	<.01	<.003	<.005	<.2	3.00	340.00	-
23	Mar 05, 1991	8.00	-	-	-	<.005	<.005	-	-	-	-	-
23	Mar 1992	5.00	<.4	<.0005	<.01	<.005	<.01	<.01	<.2	0.60	447.00	-
23	Sep 08, 1992	4.50	.0005<T	.0035<T	.030<T	0.01	.0005<T	.0020<T	.4<T	.1<T	-	-
23	Nov 02, 1992	2.00	0.02	.0030<T	.050<T	0.01	<.0005<W	.0010<T	<.2<W	0.60	-	-
23	Feb 01, 1993	2.50	.004<T	.0035<T	.050<T	0.02	.015<T	0.005	.6<T	0.70	-	-
23	Aug 10, 1993	4.00	.0008<T	.0050	.040<T	0.01	.0005<T	.0020<T	<.02<W	0.60	-	-
24	May 17, 1991	4.00	-	-	-	<.005	<.005	-	-	<.1.0	-	-
24	Mar 1992	5.00	<.4	<.0005	<.01	<.005	<.01	<.01	<.2	0.50	423.00	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
24	Aug 19, 1992	R	B	484.00	270.00	69.18	23.52	3.09	1.08	233.20	8.27	0.16	4.60	30.79	1.71
24	Nov 02, 1992	R	B	483.00	267.00	69.00	23.10	3.32	1.04	244.90	8.41	0.14	4.10	29.13	1.10
24	May 03, 1993	R	B	536.00	291.73	74.70	25.56	4.05	1.13	252.00	8.26	0.14	8.70	46.04	1.90
25	May 17, 1991	R	B	500.00	242.00	59.80	22.60	2.80	1.00	220.00	7.90	-	2.50	29.00	0.60
25	Sep 08, 1992	R	B	463.00	307.16	60.55	23.22	3.29	1.10	229.10	8.39	0.26	3.40	30.47	0.67
25	Dec 07, 1992	R	B	346.00	171.10	50.55	10.86	3.14	1.04	145.00	8.24	0.20	4.80	33.78	0.94
25	Aug 10, 1993	R	B	525.00	280.60	71.50	24.80	3.63	1.12	237.30	8.12	0.18	8.00	51.08	0.81
26	Oct 05, 1992	R	B	451.00	249.00	62.60	22.40	3.20	1.12	227.40	8.29	0.28	3.20	28.96	1.54
26	Feb 02, 1993	R	B	448.00	245.00	61.60	22.10	3.43	1.10	228.80	8.34	0.30	3.00	28.42	1.20
27	Apr 1988	R	B	545.00	271.00	76.00	22.00	6.50	0.70	250.00	7.60	0.37	13.00	19.00	0.90
28	Jun 1987	R	B	1080.00	372.00	99.00	30.00	20.00	1.00	277.00	7.70	-	121.00	26.20	<0.1
28	Sep 30, 1993	R	B	1030.00	425.00	113.00	34.80	92.30	<1	305.00	8.36	0.50	171.00	29.80	1.10
29	Jun 1987	R	B	721.00	323.00	81.00	29.00	45.00	0.70	249.00	7.80	-	50.20	19.10	0.4
29	Sep 30, 1993	R	B	870.00	407.00	101.00	37.50	60.50	<1	319.00	8.25	1.20	138.00	33.90	1.20
30	Jun 1987	R	B	1070.00	404.00	112.00	30.00	40.00	0.80	283.00	7.60	-	124.00	25.50	<0.1
30	Sep 30, 1993	R	B	986.00	408.00	109.00	32.90	86.20	<1	295.00	8.40	0.40	172.00	30.00	2.50
31	Jun 1987	R	B	888.00	354.00	92.00	30.00	28.00	0.80	252.00	7.70	-	83.40	20.90	0.8
31	Sep 30, 1993	R	B	1030.00	430.00	110.00	37.70	86.80	<1	329.00	8.42	0.40	180.00	25.90	8.50
32	Jun 1987	R	B	706.00	332.00	83.00	30.00	8.30	0.70	241.00	7.70	-	39.20	19.30	0.5
32	Sep 30, 1993	R	B	1170.00	409.00	104.00	36.30	56.30	<1	324.00	8.50	0.40	133.00	24.00	0.75
33	Sep 30, 1993	R	B	518.00	280.00	69.10	26.00	17.50	<1	233.00	8.60	0.30	31.50	31.40	1.10
34	Sep 30, 1993	R	B	639.00	307.00	85.40	22.70	34.70	<1	262.00	8.53	0.20	60.80	28.00	3.30
35	Jan 23, 1990	R	B	579.00	266.00	72.20	20.90	4.80	1.10	241.00	7.80	0.10	18.50	26.90	0.30
36	Apr 23, 1990	R	B	482.00	235.00	61.70	19.80	2.90	1.10	216.00	8.00	0.40	2.10	23.90	2.10
37	Mar 11, 1976	R	I	5400.00	1860.00	-	-	570.00	-	120.00	7.40	-	995.00	1600.00	-
38	Aug 01, 1990	R	B	-	343.00	91.00	-	9.40	-	-	-	-	22.00	36.20	0.50
38	May 01, 1991	R	B	-	-	-	-	-	-	-	-	-	-	-	<0.3
38	May 12, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	0.10
38	Sep 22, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	-
39	Aug 01, 1990	R	B	-	652.00	182.00	-	54.80	-	-	-	-	50.40	430.00	0.50

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
24	Aug 19, 1992	1.50	.005<T	.0015<T	.040<T	<.002<W	.010<T	.0010<T	<.2<W	.3<T	-	-
24	Nov 02, 1992	1.0<T	0.20	0.08	.040<T	<.002<W	<.005<W	<.0010<W	<.2<W	.4<T	-	-
24	May 03, 1993	3.00	.004<T	.0035<T	.060<T	0.02	.010<T	.0040<T	<.2<W	.3<T	-	-
25	May 17, 1991	3.00	-	-	-	<0.05	<0.05	-	-	<1.0	-	-
25	Sep 08, 1992	1.50	.005<T	.0045<T	.030<T	0.02	0.05	.0010<T	<.2<W	0.50	-	-
25	Dec 07, 1992	1.0<T	0.01	0.01	.050<T	0.02	0.05	.0010<T	<.2<W	.4<T	-	-
25	Aug 10, 1993	1.60	0.01	0.01	.040<T	0.02	0.04	.0030<T	<.2<W	0.60	-	-
26	Oct 05, 1992	1.0<T	<.002<W	.0030<T	.020<T	0.02	0.05	.0020<T	<.2<W	.3<T	-	-
26	Feb 02, 1993	1.00	0.23	0.08	.05<T	0.03	0.09	.0030<T	<.2<W	.3<T	-	-
27	Apr 1988	9.00	0.03	-	0.06	<0.05	0.69	<0.02	<2	2.10	-	-
28	Jun 1987	<3.0	-	<0.1	0.11	-	3.70	-	-	-	-	-
28	Sep 30, 1993	5.40	-	<0.005	-	0.51	6.80	<.1	<2	0.90	-	-
29	Jun 1987	<3.0	-	<0.1	<0.05	2.0	0.33	<0.002	-	-	518.00	-
29	Sep 30, 1993	4.87	-	<0.005	-	0.64	5.80	<.1	<2	0.80	-	-
30	Jun 1987	<3.0	-	<0.1	0.05	2.12	0.51	<0.002	<2	-	702.00	-
30	Sep 30, 1993	5.40	-	<0.005	-	0.52	6.20	<.1	<2	0.90	-	-
31	Jun 1987	<3.0	-	<0.1	<0.05	2.07	1.21	<0.002	<2	-	581.00	-
31	Sep 30, 1993	5.07	-	<0.005	-	1.66	2.10	1.610	<2	1.00	-	-
32	Jun 1987	<3.0	-	<0.1	<0.05	-	1.96	-	-	-	-	-
32	Sep 30, 1993	4.61	-	<0.005	-	0.50	6.10	<.1	<2	0.80	-	-
33	Sep 30, 1993	3.75	-	<0.005	-	0.64	0.40	<.1	<2	1.10	-	-
34	Sep 30, 1993	4.11	-	<0.005	-	0.52	0.40	<.1	<2	0.80	-	-
35	Jan 23, 1990	<3.0	-	<0.01	0.20	<0.05	0.17	-	<2	-	-	-
36	Apr 23, 1990	<3.0	-	-	-	<0.05	<0.05	-	-	<1.0	255.00	-
37	Mar 11, 1976	-	-	-	-	3.60	1.50	0.080	-	-	-	-
38	Aug 01, 1990	<3	-	-	-	<0.050	8.50	<0.100	-	-	431.00	0.10
38	May 01, 1991	-	-	-	-	<0.050	1.50	<0.100	-	-	-	<0.100
38	May 12, 1993	-	-	-	-	<0.005	1.83	<0.001	-	-	-	0.08
38	Sep 22, 1993	-	-	-	-	0.03	5.30	<0.009	-	-	-	<0.130
39	Aug 01, 1990	5.00	-	-	-	0.39	0.40	0.300	-	-	957.00	<0.100

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
39	Jul 01, 1992	-	-	-	-	<0.030	0.45	<0.009	-	-	-	0.16
39	Oct 01, 1992	-	-	-	-	<0.030	0.30	<0.009	-	-	-	<0.130
39	May 12, 1993	-	-	-	-	3.40	0.16	0.011	-	-	-	0.10
39	Sep 22, 1993	-	-	-	-	0.33	1.60	0.017	-	-	-	0.47
40	Aug 01, 1990	<3	-	-	-	<0.050	<0.100	0.100	-	-	251.00	0.30
40	Oct 01, 1992	-	-	-	-	<0.030	<0.007	<0.009	-	-	-	1.00
40	May 11, 1993	-	-	-	-	0.07	<0.010	0.002	-	-	-	-
40	Sep 27, 1993	-	-	-	-	0.09	0.01	<0.009	-	-	-	<0.070
41	Aug 25, 1992	<1	-	-	0.20	0.04	<0.1	<0.1	<2	1.00	-	-
42	Aug 01, 1990	<3	-	-	-	0.06	1.70	0.100	-	-	327.00	<0.100
42	May 01, 1991	-	-	-	-	0.21	2.10	<0.100	-	-	-	<0.100
42	Jul 01, 1992	-	-	-	-	0.03	1.80	0.027	-	-	-	0.22
42	Oct 01, 1992	-	-	-	-	<0.030	2.30	<0.009	-	-	-	<0.130
42	May 12, 1993	-	-	-	-	0.01	2.10	0.003	-	-	-	0.05
42	Sep 21, 1993	-	-	-	-	0.06	1.70	<0.009	-	-	-	<0.100
43	May 16, 1980	-	-	-	-	-	1.20	-	-	-	345.00	-
44	Aug 01, 1990	<3	-	-	-	<0.050	1.00	0.200	-	-	258.00	<0.100
44	May 01, 1991	-	-	-	-	<0.050	4.10	<0.100	-	-	-	<0.100
44	Jul 01, 1992	-	-	-	-	0.10	0.69	<0.009	-	-	-	<0.006
44	Oct 01, 1992	-	-	-	-	<0.030	0.65	<0.009	-	-	-	0.19
44	May 12, 1993	-	-	-	-	<0.005	0.45	<0.001	-	-	-	0.05
44	Sep 21, 1993	-	-	-	-	0.03	1.60	<0.009	-	-	-	0.24
45	Aug 01, 1990	<3	-	-	-	<0.050	3.80	<0.100	-	-	352.00	0.10
45	May 01, 1991	-	-	-	-	<0.050	3.70	<0.100	-	-	-	<0.100
45	Jul 01, 1992	-	-	-	-	<0.030	4.00	<0.009	-	-	-	0.36
45	Oct 01, 1992	-	-	-	-	<0.030	3.10	<0.009	-	-	-	1.20
45	May 13, 1993	-	-	-	-	<0.005	3.10	<0.001	-	-	-	0.09
45	Sep 13, 1993	-	-	-	-	<0.030	3.30	<0.009	-	-	-	0.20
46	Aug 01, 1990	<3	-	-	-	<0.050	2.70	<0.100	-	-	317.00	0.10
46	Jul 01, 1992	-	-	-	-	<0.030	2.50	<0.009	-	-	-	<0.130

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
46	Oct 01, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	0.50
46	May 18, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	41.00
46	Sep 13, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	-
47	Aug 01, 1990	R	B	-	297.00	78.00	-	2.90	-	-	-	-	2.00	90.00	2.70
47	May 01, 1991	R	B	-	-	-	-	-	-	-	-	-	-	-	3.50
47	Jul 01, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	1.60
47	Oct 01, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	6.10
47	May 12, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	2.30
47	Sep 21, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	-
48	Aug 01, 1990	R	B	-	1070.00	340.00	-	9.20	-	-	-	-	3.20	800.00	5.30
48	May 01, 1991	R	B	-	-	-	-	-	-	-	-	-	-	-	6.70
48	Jul 01, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	4.30
48	Oct 01, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	13.00
48	May 13, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	9.50
48	Sep 13, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	-
49	Jul 08, 1980	R	B	2000.00	1515.00	508.00	60.00	22.00	3.50	185.00	7.40	0.30	6.00	1300.00	-
50	1987	R	B	-	1220.00	380.00	-	11.70	-	-	-	-	1.19	1070.00	7.00
51	Aug 01, 1990	R	B	-	268.00	72.00	-	2.80	-	-	-	-	3.74	50.50	0.70
51	May 01, 1991	R	B	-	-	-	-	-	-	-	-	-	-	-	1.10
51	Jul 01, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	2.90
51	Oct 01, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	2.30
51	Sep 13, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	-
52	Aug 01, 1990	R	B	-	237.00	60.00	-	3.40	-	-	-	-	1.95	31.70	4.50
52	May 01, 1991	R	B	-	-	-	-	-	-	-	-	-	-	-	21.00
52	Jul 01, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	4.20
52	Oct 01, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	24.00
52	May 18, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	28.00
52	Sep 13, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	-
53	May 22, 1980	R	B	1260.00	678.00	205.00	40.00	19.00	1.70	138.00	7.50	0.90	1.00	560.00	-
54	Aug 01, 1990	R	B	-	362.00	79.00	-	18.90	-	-	-	-	30.50	66.90	0.40

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
46	Oct 01, 1992	-	-	-	-	<0.030	2.50	<0.009	-	-	-	<0.130
46	May 18, 1993	-	-	-	-	0.02	0.03	0.005	-	-	-	<0.033
46	Sep 13, 1993	-	-	-	-	0.09	<0.007	<0.009	-	-	-	0.24
47	Aug 01, 1990	<3	-	-	-	<0.050	<0.100	<0.100	-	-	346.00	<0.100
47	May 01, 1991	-	-	-	-	<0.050	<0.100	<0.100	-	-	-	0.20
47	Jul 01, 1992	-	-	-	-	0.11	0.02	<0.009	-	-	-	<0.050
47	Oct 01, 1992	-	-	-	-	0.03	<0.007	<0.009	-	-	-	<0.130
47	May 12, 1993	-	-	-	-	0.02	<0.010	<0.001	-	-	-	<0.031
47	Sep 21, 1993	-	-	-	-	0.07	0.02	<0.009	-	-	-	0.09
48	Aug 01, 1990	<3	-	-	-	0.10	<0.100	<0.100	-	-	1460.00	<0.100
48	May 01, 1991	-	-	-	-	0.12	<0.100	<0.100	-	-	-	0.18
48	Jul 01, 1992	-	-	-	-	0.04	0.03	<0.009	-	-	-	0.30
48	Oct 01, 1992	-	-	-	-	<0.030	<0.007	<0.009	-	-	-	0.24
48	May 13, 1993	-	-	-	-	0.06	0.01	<0.001	-	-	-	0.01
48	Sep 13, 1993	-	-	-	-	0.05	<0.007	<0.009	-	-	-	0.45
49	Jul 08, 1980	-	-	-	-	-	<0.1	-	-	-	2270.00	-
50	1987	<3	-	-	-	0.12	<0.1	-	-	-	1800	<0.1
51	Aug 01, 1990	3.50	-	-	-	<0.050	1.10	<0.100	-	-	305.00	0.10
51	May 01, 1991	-	-	-	-	<0.050	<0.100	<0.100	-	-	-	0.10
51	Jul 01, 1992	-	-	-	-	<0.030	0.01	<0.009	-	-	-	<0.130
51	Oct 01, 1992	-	-	-	-	<0.030	<0.007	<0.009	-	-	-	<0.130
51	Sep 13, 1993	-	-	-	-	<0.030	<0.007	<0.009	-	-	-	0.23
52	Aug 01, 1990	4.00	-	-	-	<0.050	<0.100	<0.100	-	-	279.00	0.10
52	May 01, 1991	-	-	-	-	<0.050	<0.100	<0.100	-	-	-	0.30
52	Jul 01, 1992	-	-	-	-	<0.030	<0.007	<0.009	-	-	-	<0.130
52	Oct 01, 1992	-	-	-	-	0.19	0.05	<0.009	-	-	-	1.01
52	May 18, 1993	-	-	-	-	0.02	<0.010	0.006	-	-	-	<0.034
52	Sep 13, 1993	-	-	-	-	0.04	<0.007	<0.009	-	-	-	0.15
53	May 22, 1980	-	-	-	-	-	<0.1	-	-	-	995.00	-
54	Aug 01, 1990	6.00	-	-	-	<0.050	0.70	<0.100	-	-	484.00	0.20

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
54	May 01, 1991	-	-	-	-	<0.050	0.60	<0.100	-	-	-	0.40
54	Jul 01, 1992	-	-	-	-	0.04	0.67	<0.009	-	-	-	0.17
55	May 23, 1980	-	-	-	-	-	1.00	-	-	-	405.00	-
55	U	9	-	-	-	<0.05	0.70	-	-	-	419	0.1
56	Aug 01, 1990	<3	-	-	-	<0.050	1.30	<0.100	-	-	338.00	0.10
56	May 01, 1991	-	-	-	-	<0.050	1.30	<0.100	-	-	-	<0.100
56	Jul 01, 1992	-	-	-	-	<0.030	1.00	<0.009	-	-	-	<0.130
56	Oct 01, 1992	-	-	-	-	<0.030	<0.007	<0.009	-	-	-	<0.130
56	May 18, 1993	-	-	-	-	<0.005	1.16	0.002	-	-	-	0.05
56	Sep 14, 1993	-	-	-	-	0.05	1.00	<0.009	-	-	-	0.29
57	Aug 01, 1990	3.00	-	-	-	0.40	<0.100	<0.100	-	-	247.00	0.10
57	May 01, 1991	-	-	-	-	0.41	<0.100	<0.100	-	-	-	0.10
57	Jul 01, 1992	-	-	-	-	0.38	<0.007	<0.009	-	-	-	0.15
57	Oct 01, 1992	-	-	-	-	<0.030	5.10	<0.009	-	-	-	<0.13
57	May 18, 1993	-	-	-	-	0.01	1.68	0.003	-	-	-	<0.043
57	Sep 14, 1993	-	-	-	-	0.33	0.01	<0.009	-	-	-	0.11
58	Aug 01, 1990	4.00	-	-	-	0.38	<0.100	<0.100	-	-	211.00	<0.100
58	Jul 01, 1992	-	-	-	-	0.33	0.01	<0.009	-	-	-	0.23
58	Oct 01, 1992	-	-	-	-	<0.030	2.00	<0.009	-	-	-	0.21
58	May 18, 1993	-	-	-	-	0.02	<0.010	0.002	-	-	-	<0.035
58	Sep 14, 1993	-	-	-	-	0.05	0.01	<0.009	-	-	-	<0.110
59	Aug 01, 1990	<3	-	-	-	<0.050	1.00	<0.100	-	-	314.00	0.10
59	May 01, 1991	-	-	-	-	<0.050	1.00	<0.100	-	-	-	<0.100
59	Jul 01, 1992	-	-	-	-	<0.030	0.83	<0.009	-	-	-	<0.130
59	Oct 01, 1992	-	-	-	-	<0.030	1.20	<0.009	-	-	-	<0.130
59	May 14, 1993	-	-	-	-	0.01	1.09	0.001	-	-	-	0.06
59	Sep 14, 1993	-	-	-	-	0.06	3.30	<0.009	-	-	-	0.15
60	Aug 01, 1990	5.00	-	-	-	<0.050	<0.100	<0.100	-	-	325.00	0.20
60	May 01, 1991	-	-	-	-	<0.050	1.30	0.500	-	-	-	0.20
60	Jul 01, 1992	-	-	-	-	0.03	8.60	<0.009	-	-	-	<0.130

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
60	Oct 01, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	0.60
60	May 18, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	0.70
60	Sep 14, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	-
61	Aug 01, 1990	R	B	-	298.00	77.00	-	8.40	-	-	-	-	1.29	103.00	6.40
61	May 01, 1991	R	B	-	-	-	-	-	-	-	-	-	-	-	7.30
61	Jul 01, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	2.40
61	Oct 01, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	4.90
61	May 18, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	10.30
61	Sep 14, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	-
62	May 26, 1980	R	B	2790.00	1460.00	495.00	53.00	183.00	18.00	191.00	7.30	0.30	275.00	1220.00	-
63	May 15, 1980	R	B	1420.00	750.00	232.00	42.00	54.00	8.00	345.00	7.40	0.20	79.00	380.00	-
64	Jul 12, 1991	R	I	4780.00	295.50	85.20	20.10	873.30	27.19	164.40	8.18	-	1380.00	47.62	-
65	May 20, 1980	R	B	980.00	492.00	166.00	19.00	29.00	6.10	307.00	7.50	0.20	134.00	53.00	-
66	U	R	I	714.00	406.50	103.00	36.30	7.20	0.84	263.50	8.10	-	22.50	147.00	-
67	Jul 04, 1980	R	B	618.00	338.00	88.00	29.00	6.00	9.20	313.00	7.50	0.20	9.00	25.00	-
68	May 16, 1980	R	B	1800.00	640.00	220.00	23.00	196.00	20.00	209.00	7.60	0.80	106.00	720.00	-
69	May 20, 1980	R	B	715.00	376.00	112.00	23.00	13.00	3.50	278.00	7.90	0.10	49.00	53.00	-
70	May 16, 1980	R	B	1240.00	584.00	170.00	39.00	42.00	15.00	441.00	7.70	0.20	128.00	33.00	-
71	May 20, 1980	R	B	685.00	404.00	104.00	35.00	3.00	1.00	230.00	7.80	0.60	4.00	170.00	-
72	Jul 04, 1980	R	B	450.00	254.00	81.00	13.00	5.00	0.90	201.00	7.70	0.20	2.00	59.00	-
73	May 21, 1980	R	B	860.00	493.00	152.00	27.00	9.00	1.10	175.00	7.80	0.50	2.00	335.00	-
74	Oct 01, 1982	R	B	397.00	212.90	-	-	6.40	0.90	-	-	-	.6<T	14.00	-
75	May 23, 1980	R	B	385.00	187.00	50.00	15.00	11.00	1.00	170.00	8.00	1.20	<1	40.00	-
76	May 20, 1980	R	B	895.00	431.00	107.00	40.00	46.00	1.10	355.00	7.60	0.10	42.00	100.00	-
77	Jul 07, 1980	R	B	584.00	332.00	120.00	8.00	5.00	1.00	206.00	7.70	0.30	3.00	116.00	-
78	May 22, 1980	R	B	560.00	297.00	112.00	4.00	6.00	1.00	239.00	7.80	<0.1	25.00	17.00	-
79	Jul 08, 1980	R	B	770.00	462.00	147.00	23.00	6.00	1.00	197.00	8.00	0.20	1.00	245.00	-
80	Jan 27, 1986	R	B	593.00	295.00	76.00	25.50	11.00	1.45	241.00	7.90	-	21.20	36.00	-
81	Oct 07, 1980	R	B	450.00	234.00	-	-	6.00	1.20	212.00	7.90	-	3.00	30.00	-
82	Oct 07, 1980	R	B	485.00	250.00	-	-	7.00	1.10	196.00	7.80	-	1.00	65.00	-

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
60	Oct 01, 1992	-	-	-	-	<0.030	1.00	<0.009	-	-	-	<0.130
60	May 18, 1993	-	-	-	-	0.01	<0.010	0.002	-	-	-	0.05
60	Sep 14, 1993	-	-	-	-	0.09	0.01	<0.009	-	-	-	0.15
61	Aug 01, 1990	3.00	-	-	-	0.45	<0.100	<0.100	-	-	356.00	<0.100
61	May 01, 1991	-	-	-	-	<0.050	<0.100	<0.100	-	-	-	0.20
61	Jul 01, 1992	-	-	-	-	0.33	<0.007	<0.009	-	-	-	<0.001
61	Oct 01, 1992	-	-	-	-	0.45	0.04	<0.009	-	-	-	0.22
61	May 18, 1993	-	-	-	-	0.44	<0.010	0.004	-	-	-	0.02
61	Sep 14, 1993	-	-	-	-	0.65	0.08	0.014	-	-	-	0.10
62	May 26, 1980	-	-	-	-	-	0.40	-	-	-	2580.00	-
63	May 15, 1980	-	-	-	-	-	0.30	-	-	-	1110.00	-
64	Jul 12, 1991	-	-	-	3.8	3.6	<.05	<.005	-	-	-	-
65	May 20, 1980	-	-	-	-	-	0.60	-	-	-	630.00	-
66	U	-	-	-	<2<W	<.05<W	.15<T	.01<T	-	-	-	-
67	Jul 04, 1980	-	-	-	-	-	1.50	-	-	-	445.00	-
68	May 16, 1980	-	-	-	-	-	0.30	-	-	-	1440.00	-
69	May 20, 1980	-	-	-	-	-	<0.1	-	-	-	390.00	-
70	May 16, 1980	-	-	-	-	-	6.20	-	-	-	775.00	-
71	May 20, 1980	-	-	-	-	-	<0.1	-	-	-	495.00	-
72	Jul 04, 1980	-	-	-	-	-	<0.1	-	-	-	295.00	-
73	May 21, 1980	-	-	-	-	-	<0.1	-	-	-	675.00	-
74	Oct 01, 1982	-	.01<T	.02	.1<T	.1	.1<T	-	-	-	-	-
75	May 23, 1980	-	-	-	-	-	<0.1	-	-	-	250.00	-
76	May 20, 1980	-	-	-	-	-	<0.1	-	-	-	590.00	-
77	Jul 07, 1980	-	-	-	-	-	0.40	-	-	-	480.00	-
78	May 22, 1980	-	-	-	-	-	5.00	-	-	-	335.00	-
79	Jul 08, 1980	-	-	-	-	-	<0.1	-	-	-	645.00	-
80	Jan 27, 1986	-	<.010<W	-	20<T	<.05<W	2.90	<.005<W	<2<W	-	-	-
81	Oct 07, 1980	-	-	-	0.20	-	<.1	-	-	0.40	-	-
82	Oct 07, 1980	-	-	-	0.40	-	<.1	-	-	0.50	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
83	Oct 07, 1980	R	B	505.00	271.00	-	-	6.00	0.90	205.00	7.70	-	2.00	75.00	-
84	Feb 04, 1981	R	I	2300.00	246.00	-	-	420.00	2.50	288.00	-	-	556.00	77.00	-
85	Nov 10, 1980	R	I	1450.00	136.00	-	-	265.00	9.50	472.00	-	-	228.00	80.00	-
85	Feb 04, 1981	R	I	1100.00	167.00	-	-	160.00	13.00	497.00	-	-	220.00	57.00	-
86	Jan 23, 1989	R	B	606.00	281.00	73.00	24.00	5.90	1.00	238.00	7.80	-	18.60	27.30	1.70
87	Mar 29, 1978	R	B	445.00	245.00	65.00	20.00	3.00	1.10	228.00	7.50	0.10	2.00	23.00	7.80
88	Oct 04, 1991	R	B	633.00	281.80	67.60	27.50	49.30	1.72	208.00	7.62	<0.5	37.80	21.40	<1
89	Oct 04, 1991	R	B	393.00	241.80	58.50	23.30	3.39	0.98	224.00	8.03	<0.5	1.30	20.70	21.00
90	May 22, 1980	R	B	540.00	285.00	89.00	15.00	3.00	2.70	250.00	7.70	0.10	7.00	29.00	-
91	Oct 04, 1991	R	B	398.00	242.30	58.70	23.30	3.52	0.90	228.00	8.03	<0.5	2.60	22.20	4.00
94	1989	R	B	629.00	262.00	67.00	23.00	19.00	0.90	227.00	8.00	-	41.60	31.40	17.00

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
83	Oct 07, 1980	-	-	-	0.20	-	0.40	-	-	0.40	-	-
84	Feb 04, 1981	-	-	-	2.00	0.40	1.00	0.050	-	1.90	-	-
85	Nov 10, 1980	-	-	-	16.00	1.10	1.00	0.350	-	27.00	-	-
85	Feb 04, 1981	-	-	-	5.80	0.20	2.00	0.170	-	13.50	-	-
86	Jan 23, 1989	<3.0	-	-	.16	<0.5	-	-	-	-	-	-
87	Mar 29, 1978	10.00	0.39	-	0.10	0.10	0.10	<.01	<1	2.00	-	-
88	Oct 04, 1991	<5.0	-	-	-	<1.7	7.50	<0.5	-	-	48838	-
89	Oct 04, 1991	45.00	-	-	-	<1.7	<0.5	<0.15	-	-	27681	-
90	May 22, 1980	-	-	-	-	-	4.00	-	-	-	350.00	-
91	Oct 04, 1991	10.00	-	-	-	<1.7	<0.5	<0.5	-	-	22803	-
94	1989	<3.0	-	0.01	-	0.05	<0.05	-	-	-	332.00	-

WATER QUALITY DATA: HEAVY METAL PARAMETERS FOR BEDROCK WELLS

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	Ag UG/L	Al UG/L	As UG/L	Ba UG/L	B UG/L	Be UG/L	Cd UG/L	Cn UG/L	Co UG/L	Cr UG/L	Cu UG/L	Fe UG/L	Hg UG/L
1	Sep 17, 1987	R	B	-	<3.00<	<1.00<	27,000	50.00<T	-	<30<	-	-	4,000	8,000	15,000	-
1	Dec 21, 1987	R	B	-	4,000	<1.00<	450,000	85,000	-	<30<	-	-	4,000	6,000	530,000	-
1	Dec 22, 1988	R	B	-	2,400	<.05<W	38,000	69,000	-	<.05<W	-	-	8,200	6,600	310,000	-
1	May 16, 1988	R	B	-	5,100	.91<T	30,000	11,000<T	-	<.05<W	-	-	.65<T	17,000	53,000	-
2	Sep 17, 1987	R	B	-	3.00<W	<1.00<	23,000	50.00<T	-	<30<	-	-	3,000	4,000	110,000	-
2	Dec 21, 1987	R	B	-	4,000	<1.00<	440,000	93,000	-	<30<	-	-	4,000	<1.00<	510,000	-
2	May 16, 1988	R	B	-	5,300	1,300	33,000	32,000	-	<.05<W	-	-	.36<T	5,400	22,000<T	-
2	Dec 22, 1988	R	B	-	2,500	<.05<W	39,000	100,000	-	.07<T	-	-	9,400	4,300	64,000	-
2	Sep 20, 1989	R	B	-	11,000	1,200	40,000	90,000	-	.70<T	-	-	13,000	2,500	27,000	-
2	May 23, 1990	R	B	-	18,000	1,500	40,000	45,000	-	<.05<W	-	-	<.50<W	7,500	31,000<T	-
2	Jun 18, 1991	R	B	-	1,300	<.10<W	31,000	25,000	-	<.05<W	-	-	4,70<T	2,10<T	<6,00<W	-
2	Oct 08, 1991	T	B	<.05<W	1,900	<1.0<W	41,000	62,000	<0.05<W	.10<T	<.001<W	.02<W	7,900	15,000	<6.0<W	<.02<W
2	Mar 02, 1992	R	B	-	.53<T	.81<T	130,000	43,000	-	<.05<W	-	-	2,70<T	.91<T	770,000	-
2	May 27, 1992	R	B	-	3,300	2,400	38,000	35,000	-	<.05<W	-	-	.66<T	4,50<T	30,000<T	-
2	Jan 25, 1993	R	B	-	1,700	<.10<W	34,000	37,000	-	<.05<W	-	-	4,50<T	5,100	27,000<T	-
2	Jun 02, 1993	R	B	-	2,700	.11<T	30,000	28,000	-	<.05<W	-	-	<.50<W	2,40<T	12,000<T	-
3	Sep 17, 1987	R	B	-	<3.00<	<1.00<	60,000	90,000	-	<30<	-	-	4,000	5,000	340,000	-
3	Dec 21, 1987	R	B	-	6,000	<1.00<	57,000	109,000	-	<30<	-	-	4,100	5,900	<50,00<	-
3	May 16, 1988	R	B	-	5,700	2,900	78,000	58,000	-	.26<T	-	-	.18<T	1,900	72,000	-
3	Sep 20, 1989	R	B	-	13,000	1,400	91,000	78,000	-	0.820	-	-	.49<T	4,300	890,000	-
3	Jun 18, 1991	R	B	-	.50<T	.65<T	97,000	69,000	-	.26<T	-	-	<.50<W	2,00<T	170,000	-
3	Mar 02, 1992	R	B	-	.99<T	.53<T	110,000	30,000	-	<.05<W	-	-	.55<T	1,20<T	10,000<T	-
3	Dec 12, 1993	R	B	-	4,900	<.05<W	72,000	110,000	-	0.710	-	-	6,600	21,000	290,000	-
4	Sep 17, 1987	R	B	-	<3.00<	<1.00<	42,000	90,000	-	<30<	-	-	4,000	4,000	50,000	-
4	Dec 21, 1987	R	B	-	12,000	<1.00<	39,000	100,000	-	<30<	-	-	3,900	2,600	<3,00<	-
4	May 18, 1988	R	B	-	4,000	2,100	49,000	70,000	-	.06<T	-	-	.34<T	3,500	7,300<T	-
4	Dec 22, 1988	R	B	-	3,800	<.05<W	70,000	290,000	-	.22<T	-	-	15,000	8,900	1400,000	-

SITE #	DATE SAMPLED	Mn UG/L	Mo UG/L	Ni UG/L	Pb UG/L	Sb UG/L	Se UG/L	Sr UG/L	Ti UG/L	Ti UG/L	U UG/L	V UG/L	Zn UG/L
1	Sep 17, 1987	3.000	-	<1.00<	<3.00<	-	<1.00<	-	-	-	-	-	8.000
1	Dec 21, 1987	19.000	-	4.000	<3.00<	-	<1.00<	-	-	-	-	-	<1.00<
1	Dec 22, 1988	11.000	-	<.10<W	0.890	-	.88<T	-	-	-	-	-	7.100
1	May 16, 1988	1.900	-	<.10<W	1.500	-	.90<T	-	-	-	-	-	35.000
2	Sep 17, 1987	5.000	-	<1.00<	<3.00<	-	<1.00<	-	-	-	-	-	13.000
2	Dec 21, 1987	19.000	-	4.000	<3.00<	-	<1.00<	-	-	-	-	-	<1.00<
2	May 16, 1988	0.880	-	.30<T	0.450	-	2.40<T	-	-	-	-	-	8.800
2	Dec 22, 1988	3.300	-	.47<T	0.580	-	.34<T	-	-	-	-	-	12.000
2	Sep 20, 1989	2.400	-	<.10<W	.20<T	-	<1.00<W	-	-	-	-	-	7.400
2	May 23, 1990	0.720	-	1.40<T	0.940	-	<1.00<W	-	-	-	-	-	13.000
2	Jun 18, 1991	.26<T	-	<.20<W	.07<T	-	<1.00<W	-	-	-	-	-	5.500
2	Oct 08, 1991	.28<T	.15<T	<.20<W	.45<T	.36<T	.15<T	170.000	11.000	<.05<W	.33<T	<.05<W	6.500
2	Mar 02, 1992	29.000	-	3.300	<.05<W	-	<1.00<W	-	-	-	-	-	5.600
2	May 27, 1992	0.510	-	5.600	.25<T	-	1.80<T	-	-	-	-	-	10.000
2	Jan 25, 1993	.36<T	-	<.20<W	.29<T	-	1.50<T	-	-	-	-	-	8.500
2	Jun 02, 1993	0.540	-	4.700	.24<T	-	<1.00<W	-	-	-	-	-	5.300
3	Sep 17, 1987	13.000	-	2.000	8.000	-	<1.00<W	-	-	-	-	-	73.000
3	Dec 21, 1987	8.000	-	5.900	<3.00<	-	<1.00<	-	-	-	-	-	71.000
3	May 16, 1988	0.160	-	<.10<W	0.580	-	1.30<T	-	-	-	-	-	33.000
3	Sep 20, 1989	20.000	-	1.40<T	2.300	-	<1.00<W	-	-	-	-	-	44.000
3	Jun 18, 1991	5.500	-	<.20<W	0.590	-	<1.00<W	-	-	-	-	-	29.000
3	Mar 02, 1992	0.550	-	4.400	.15<T	-	<1.00<W	-	-	-	-	-	2.800
3	Dec 12, 1993	15.000	-	1.60<T	4.100	-	1.80<T	-	-	-	-	-	65.000
4	Sep 17, 1987	3.000	-	<1.00<	3.000	-	<1.00<	-	-	-	-	-	150.000
4	Dec 21, 1987	2.300	-	2.600	<3.00<	-	<1.00<	-	-	-	-	-	91.000
4	May 18, 1988	2.200	-	1.50<T	0.760	-	2.00<T	-	-	-	-	-	170.000
4	Dec 22, 1988	12.000	-	1.70<T	19.000	-	1.40<T	-	-	-	-	-	8600.000

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	Ag UG/L	Al UG/L	As UG/L	Ba UG/L	B UG/L	Be UG/L	Cd UG/L	Cn UG/L	Co UG/L	Cr UG/L	Cu UG/L	Fe UG/L	Hg UG/L
4	Sep 20, 1989	R	B	-	15,000	.59<T	94,000	200,000	-	.13<T	-	-	13,000	6,100	210,000	-
4	May 22, 1990	R	B	-	25,000	2,400	98,000	320,000	-	.20<T	-	-	7,700	9,600	430,000	-
4	Jun 18, 1991	R	B	-	.41<T	<.10<W	84,000	120,000	-	<.05<W	-	-	<.50<W	3.20<T	270,000	-
4	Mar 02, 1992	R	B	-	1,500	1,500	88,000	98,000	-	.17<T	-	-	5,500	12,000	480,000	-
4	May 27, 1992	R	B	-	4,100	2,500	87,000	180,000	-	.14<T	-	-	1,70<T	6,100	390,000	-
5	May 11, 1988	R	B	-	91,000	.26<T	27,000	10,00<T	-	.16<T	-	-	1,300	1,900	180,000	-
5	May 18, 1988	R	B	-	49,000	1,100	35,000	21,000	-	.41<T	-	-	1,700	2,100	280,000	-
5	Dec 22, 1988	R	B	-	8,600	.06<T	22,000	32,000	-	.20<T	-	-	2,700	2,900	35,00<T	-
5	Sep 20, 1989	R	B	-	15,000	.37<T	24,000	54,000	-	.13<T	-	-	9,100	1,300	9,40<T	-
5	May 22, 1990	R	B	-	39,000	<.10<W	24,000	78,000	-	.20<T	-	-	2,90<T	2,80<T	10,00<T	-
5	Jan 31, 1991	R	B	<.05<W	10,000	-	25,000	-	-	.18<T	-	.07<T	.51<T	2.1<T	15,00<T	-
5	Jan 31, 1991	T	B	<.05<W	8,500	-	23,000	-	-	.06<T	-	.1<T	.53<T	14,000	11,00<T	-
5	Jun 18, 1991	R	B	-	1,800	.43<T	26,000	20,00<T	-	.10<T	-	-	<.50<W	1.30<T	<.600<W	-
5	Oct 08, 1991	T	B	<.05<W	2,100	<.10<W	25,000	47,000	<.005<W	.14<T	<.001<W	<.02<W	6,300	6,300	<.600<W	<.02<W
5	Mar 02, 1992	R	B	-	2,900	.34<T	26,000	22,000	-	.14<T	-	-	.81<T	2.20<T	17,00<T	-
5	May 27, 1992	R	B	-	11,000	.41<T	25,000	32,000	-	.09<T	-	-	<.50<W	1.60<T	19,00<T	-
5	Jan 25, 1993	R	B	-	2,800	.38<T	37,000	82,000	-	.29<T	-	-	4,90<T	2.4<T	120,000	-
5	Mar 18, 1993	R	B	-	2,400	<.10<W	42,000	100,000	-	.11<T	-	-	5,00<T	.56<T	14,00<T	-
5	Jun 02, 1993	R	B	-	3,100	.45<T	37,000	80,000	-	<.05<W	-	-	<.50<W	1.40<T	310,000	-
6	Sep 17, 1987	R	B	-	<.300<	<.100<	25,000	30,00<T	-	<.30<	-	-	3,000	6,000	15,000	-
6	Dec 21, 1987	R	B	-	10,000	<.100<	23,000	29,00<T	-	<.30<	-	-	2,500	2,900	<.300<	-
6	May 16, 1988	R	B	-	4,400	.46<T	31,000	9,00<T	-	<.05<W	-	-	<.10<W	2,400	9,40<T	-
6	Dec 22, 1988	R	B	-	4,800	.50<T	31,000	77,000	-	<.05<W	-	-	8,700	3,100	12,00<T	-
6	Sep 20, 1989	R	B	-	15,360	.72<T	33,830	59,580	-	.06<T	-	-	10,950	2,630	<.500<W	-
6	May 22, 1990	R	B	-	37,000	.32<T	32,000	100,000	-	<.05<W	-	-	4,00<T	3,60<T	11,00<T	-
6	Jan 31, 1991	T	B	-	1,900	-	34,000	-	-	<.05<W	-	.08<T	.58<T	7,300	<.600<W	-
6	Jan 31, 1991	R	B	-	1,800	-	33,000	-	-	<.05<W	-	.11<T	<.50<W	8,700	<.600<W	-
6	Jun 17, 1991	R	B	-	1,00<T	.48<T	33,000	6,00<T	-	<.05<W	-	-	<.50<W	1.20<T	<.600<W	-
6	May 27, 1992	R	B	-	5,900	<.10<W	38,000	7,50<T	-	.06<T	-	-	<.50<W	5,800	43,00<T	-
6	Jan 27, 1993	R	B	-	2,700	.44<T	36,000	18,00<T	-	<.05<W	-	-	3,30<T	2.20<T	<.600<W	-

SITE #	DATE SAMPLED	Mn UG/L	Mo UG/L	Ni UG/L	Pb UG/L	Sb UG/L	Se UG/L	Sr UG/L	Ti UG/L	Tl UG/L	U UG/L	V UG/L	Zn UG/L
4	Sep 20, 1989	18.000	-	.97<T	4.800	-	<1.00<W	-	-	-	-	-	65.000
4	May 22, 1990	4.200	-	<20<W	2.700	-	<1.00<W	-	-	-	-	-	44.000
4	Jun 18, 1991	3.400	-	<20<W	0.820	-	<1.00<W	-	-	-	-	-	25.000
4	Mar 02, 1992	5.000	-	6.600	1.900	-	<1.00<W	-	-	-	-	-	38.000
4	May 27, 1992	6.400	-	9.200	44.000	-	1.20<T	-	-	-	-	-	44.000
5	May 11, 1988	10.000	-	<10<W	1.900	-	.71<T	-	-	-	-	-	430.000
5	May 18, 1988	0.190	-	3.200	3.200	-	2.50<T	-	-	-	-	-	1500.000
5	Dec 22, 1988	1.200	-	1.20<T	1.200	-	<20<W	-	-	-	-	-	170.000
5	Sep 20, 1989	0.510	-	<10<W	0.750	-	<1.00<W	-	-	-	-	-	100.000
5	May 22, 1990	0.680	-	<20<W	0.890	-	<1.00<W	-	-	-	-	-	81.000
5	Jan 31, 1991	0.660	-	<20<W	1.500	-	<1.0<W	-	-	-	-	-	180.000
5	Jan 31, 1991	0.590	-	<20<W	0.960	-	<1.0<W	-	-	-	-	-	95.000
5	Jun 18, 1991	.30<T	-	<20<W	0.840	-	<1.00<W	-	-	-	-	-	61.000
5	Oct 08, 1991	0.640	0.530	<20<W	0.850	.27<T	<1.0<W	130.000	10.000	<.05<W	0.570	<.05<W	71.000
5	Mar 02, 1992	.45<T	-	3.800	0.830	-	1.20<T	-	-	-	-	-	110.000
5	May 27, 1992	0.670	-	1.10<T	76.000	-	<1.00<W	-	-	-	-	-	76.000
5	Jan 25, 1993	5.600	-	<20<W	1.400	-	1.20<T	-	-	-	-	-	350.000
5	Mar 18, 1993	4.70	-	-	.26<T	-	<1.00<W	-	-	-	-	-	150.000
5	Jun 02, 1993	5.800	-	4.400	2.400	-	<1.00<W	-	-	-	-	-	420.000
6	Sep 17, 1987	17.000	-	2.000	<3.00<	-	<1.00<	-	-	-	-	-	150.000
6	Dec 21, 1987	16.000	-	<1.00<	<3.00<	-	<1.00<	-	-	-	-	-	50.000
6	May 16, 1988	18.000	-	<10<W	0.300	-	.30<T	-	-	-	-	-	48.000
6	Dec 22, 1988	15.000	-	<10<W	0.550	-	<20<W	-	-	-	-	-	47.000
6	Sep 20, 1989	14.520	-	<10<W	0.300	-	<1.00<W	-	-	-	-	-	40.140
6	May 22, 1990	12.000	-	<20<W	.40<T	-	1.10<T	-	-	-	-	-	37.000
6	Jan 31, 1991	13.000	-	<20<W	.41<T	-	<1.00<W	-	-	-	-	-	88.000
6	Jan 31, 1991	15.000	-	<20<W	0.530	-	<1.00<W	-	-	-	-	-	44.000
6	Jun 17, 1991	15.000	-	<20<W	.18<T	-	<1.00<W	-	-	-	-	-	21.000
6	May 27, 1992	78.000	-	<20<W	1.000	-	<1.00<W	-	-	-	-	-	53.000
6	Jan 27, 1993	14.000	-	<20<W	.15<T	-	<1.00<W	-	-	-	-	-	33.000

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	Ag UG/L	Al UG/L	As UG/L	Ba UG/L	B UG/L	Be UG/L	Cd UG/L	Cn UG/L	Co UG/L	Cr UG/L	Cu UG/L	Fe UG/L	Hg UG/L
6	Jun 02, 1993	R	B	-	3,000	43<T	35,000	21,000	-	<.05<W	-	-	7,900	2.40<T	<6.00<W	-
7	Sep 17, 1987	R	B	-	<3.00<	<1.00<	28,000	10,000<T	-	<.30<	-	-	4,000	9,000	380,000	-
7	Dec 21, 1987	R	B	-	44,000	<1.00<	29,000	32,000<T	-	<.30<	-	-	3,000	4,400	480,000	-
7	May 16, 1988	R	B	-	8,500	30<T	36,000	8.10<T	-	<.05<W	-	-	<.10<W	4,600	68,000	-
7	Dec 22, 1988	R	B	-	4,500	30<T	37,000	24,000	-	<.05<W	-	-	1,700	3,700	94,000	-
7	Sep 20, 1989	R	B	-	18,600	32<T	39,500	40,600	-	.06<T	-	-	6,250	10,550	89,000	-
7	May 22, 1990	R	B	-	38,000	.12<T	35,000	140,000	-	.08<T	-	-	5,200	13,000	47,000<T	-
7	Jan 31, 1991	R	B	-	3,600	-	36,000	-	-	<.05<W	-	.04<T	.99<T	170,000	68,000	-
7	Jan 31, 1991	T	B	-	3,800	-	35,000	-	-	<.05<W	-	.13<T	<.50<W	15,000	55.00<T	-
7	Jun 17, 1991	R	B	-	2,800	26<T	34,000	6.10<T	-	.07<T	-	-	<.50<W	12,000	30,000<T	-
7	Mar 02, 1992	R	B	-	.74<T	81<T	39,000	9.40<T	-	<.05<W	-	-	.92<T	3.50<T	<6.00<W	-
7	May 27, 1992	R	B	-	11,000	<.10<W	42,000	9.00<T	-	.07<T	-	-	<.50<W	9,700	57,000<T	-
7	Jan 27, 1993	R	B	-	2,800	33<T	35,000	16,000<T	-	<.05<W	-	-	2.60<T	4.50<T	17,000<T	-
7	Jun 02, 1993	R	B	-	3,500	.18<T	37,000	8.00<T	-	<.05<W	-	-	.50<W	4.90<T	130,000	-
8	Jun 26, 1992	R	B	-	5,100	27<T	23,000	12,000<T	-	<.05<W	-	-	.90<T	1.30<T	330,000	-
8	Jan 25, 1993	R	B	-	1,900	27<T	34,000	20,000<T	-	.06<T	-	-	3.90<T	2.60<T	17,000<T	-
8	Jan 27, 1993	R	B	-	2,900	<.10<W	20,000	19,000<T	-	<.05<W	-	-	3.70<T	<.50<W	9.40<T	-
8	Jun 02, 1993	R	B	-	3,600	20<T	23,000	19,000<T	-	<.05<W	-	-	6,400	1.00<T	100,000	-
9	Nov 26, 1990	R	B	-	10,000	-	-	-	-	0.200	-	4,400	-	29,500	5,600	-
9	Dec 04, 1990	R	B	-	10,000	-	-	-	-	0.200	-	2,300	-	52,300	2,800	-
9	Apr 15, 1991	R	B	-	7,000	-	-	-	-	1,900	-	1,100	-	48,200	5,900	-
9	Apr 15, 1991	R	B	-	7,000	-	-	-	-	0.300	-	1,100	-	48,900	6,500	-
9	Jul 02, 1991	R	B	-	22,000	-	-	-	-	0.200	-	1,100	-	48,200	11,900	-
9	Apr 27, 1992	R	B	-	18,000	-	-	-	-	0.200	-	1,100	-	41,600	4,800	-
9	Jun 22, 1992	R	B	-	33,000	-	-	-	-	0.200	-	1,200	-	108,000	4,400	-
9	Nov 02, 1992	R	B	-	48,000	-	-	-	-	0.200	-	1,100	-	95,000	6,500	-
10	Nov 26, 1990	R	B	-	15,000	-	-	-	-	0.200	-	5,100	-	34,500	1,400	-
10	Dec 04, 1990	R	B	-	10,000	-	-	-	-	0.200	-	3,800	-	45,200	2,400	-
10	Jul 02, 1991	R	B	-	22,000	-	-	-	-	0.200	-	1,100	-	45,900	7,700	-
11	Nov 26, 1990	R	B	-	20,000	-	-	-	-	0.200	-	7,000	-	9,400	3,400	-

[illegible]

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	Ag UG/L	Al UG/L	As UG/L	Ba UG/L	B UG/L	Be UG/L	Cd UG/L	Cn UG/L	Co UG/L	Cr UG/L	Cu UG/L	Fe UG/L	Hg UG/L
11	Dec 04, 1990	R	B	-	10.00	-	-	-	-	0.200	-	3.500	-	2.400	5.700	-
11	Apr 15, 1991	R	B	-	7.000	-	-	-	-	0.300	-	1.500	-	2.800	8.400	-
11	Jul 02, 1991	R	B	-	20.000	-	-	-	-	0.200	-	0.800	-	3.100	9.000	-
11	Apr 27, 1992	R	B	-	15.000	-	-	-	-	0.200	-	1.100	-	1.900	6.100	-
11	Jun 22, 1992	R	B	-	12.000	-	-	-	-	0.200	-	1.600	-	3.200	5.700	-
11	Nov 02, 1992	R	B	-	10.000	-	-	-	-	0.200	-	1.200	-	3.000	6.800	-
14	Jan 09, 1992	R	B	<.05<W	1.100	1.500	58.000	220.000	<.05<W	.08<T	-	.07<T	<.50<W	1.90<T	31.00<T	-
15	Jan 31, 1986	R	B	-	17.000	-	20.000	-	1.00<T	.30<T	1.000	2.000	1.00<T	<1.00<W	34.000	-
16	Jan 1992	R	B	4.000	31.000	-	24.000	10.000	<.05<W	<.05<W	-	<.02<W	20.000	<1.00<W	106.000	-
17	Jan 29, 1991	R	B	<.05<W	2.300	.62<T	61.000	39.000	.07<W	<.05<W	<.001<W	<.02<W	5.800	1.50<T	59.000	<.02<W
18	Feb 01, 1993	R	B	<.05<W	3.200	.35<T	75.000	20<T	<.05<W	<.05<W	-	<.02<W	4.00<T	<.50<W	77.000	<.02<W
19	Mar 05, 1991	R	B	-	-	-	-	-	-	-	-	-	-	10.000	90.000	-
19	Mar 19, 1992	R	B	<10.00	28.000	-	83.000	-	-	-	-	28.000	-	<3.00	115.000	<1.00
20	Mar 05, 1991	R	B	-	-	-	-	-	-	-	-	-	-	10.000	32.000	-
20	Mar 19, 1992	R	B	<10.00	<25.00	-	115.000	-	<3.00	<3.00	-	6.000	-	<5.00	<3.00	400.000
20	Feb 01, 1993	R	B	<.05<W	3.900	1.800	110.000	25.000	<.05<W	<.05<W	-	<.02<W	6.200	<.50<W	280.000	<.02<W
21	Mar 05, 1991	R	B	-	-	-	-	-	-	-	-	-	-	10.000	67.000	-
21	Mar 19, 1992	R	B	<10.00	26.000	-	77.000	-	<3.00	<3.00	-	39.000	-	<5.00	<3.00	625.000
21	May 03, 1993	R	B	<.05<W	1.900	2.900	70.000	23.000	<.05<W	.06<T	-	.48<T	1.20<T	.67<T	400.000	<.02<W
22	Mar 05, 1991	R	B	-	-	-	-	-	-	-	-	-	-	<10.00	320.000	-
22	Mar 19, 1992	R	B	<10.00	<25.00	-	94.000	-	<3.00	<3.00	-	15.000	-	<5.00	<3.00	146.000
22	May 03, 1993	R	B	<.05<W	2.300	2.100	92.000	31.000	<.05<W	<.05<W	-	.36<T	8.900	<.50<W	190.000	<.02<W
23	May 01, 1987	R	B	<.01	-	1.000	120.000	-	-	<.001	<.01	2.000	2.000	0.040	370.000	<2.00
23	Mar 05, 1991	R	B	-	-	-	-	-	-	-	-	-	-	<10.00	300.000	-
23	Mar 19, 1992	R	B	<10.00	34.000	-	114.000	-	<3.00	<3.00	-	14.000	-	<5.00	<3.00	304.000
23	Feb 01, 1993	R	B	<.05<W	3.800	1.00<T	100.000	23.000	<.05<W	<.05<W	-	.1<T	5.900	<.50<W	280.000	<.02<W
24	Apr 11, 1988	R	B	<10.00	-	2.000	80.000	2300.000	-	<1.00	<10.00	-	<10.00	<10.00	310.000	-
24	May 24, 1991	R	B	-	-	-	-	-	-	-	-	-	-	<10.00	320.000	-
24	May 03, 1993	R	B	<.05<W	2.300	.45<T	100.000	27.000	<.05<W	.08<T	-	.27<T	8.900	<.50<W	160.000	<.02<W
25	Apr 11, 1988	R	B	<10.00	-	<1.00	80.000	2300.000	-	<1.00	<10.00	-	10.000	<10.00	130.000	-

SITE #	DATE SAMPLED	Mn UG/L	Mo UG/L	Ni UG/L	Pb UG/L	Sb UG/L	Se UG/L	Sr UG/L	Ti UG/L	Ti UG/L	U UG/L	V UG/L	Zn UG/L
11	Dec 04, 1990	1.700	-	24.000	3.900	-	-	-	-	-	-	-	50.000
11	Apr 15, 1991	1.100	-	11.000	3.300	-	-	-	-	-	-	-	35.700
11	Jul 02, 1991	0.500	-	16.000	0.700	-	-	-	-	-	-	-	50.000
11	Apr 27, 1992	0.700	-	4.000	0.400	-	-	-	-	-	-	-	74.600
11	Jun 22, 1992	0.500	-	4.000	0.800	-	-	-	-	-	-	-	60.000
11	Nov 02, 1992	0.700	-	4.000	0.400	-	-	-	-	-	-	-	60.000
14	Jan 09, 1992	5.400	4.500	.41<T	1.500	0.680	<1.00<W	810.000	9.400	<.05<W	25<T	<.05<W	26.000
15	Jan 31, 1986	6.000	1.000	<2.00<T	4.000	-	-	890.000	<3.00<	-	-	<1.00<W	1.000
16	Jan 1992	7.000	<20<W	<20<W	<20<W	-	-	1350.000	-	-	-	-	6.000
17	Jan 29, 1991	9.400	0.930	<20<W	0.880	<.46<T	<1.00<W	250.000	14.000	<.05<W	0.920	<.05<W	21.000
18	Feb 01, 1993	9.300	0.680	<20<W	.48<T	.50<T	<1.00<W	520.000	7.800	<.05<W	.42<T	<.05<W	17.000
19	Mar 05, 1991	10.000	-	-	-	-	-	-	-	-	-	-	20.000
19	Mar 19, 1992	25.000	6.000	<10.00	<10.00	-	-	-	-	-	<2.00	<3.00	19.000
20	Mar 05, 1991	10.000	-	-	-	-	-	-	-	-	-	-	<10.00
20	Mar 19, 1992	<1.00	21.000	<6.00	<10.00	-	-	468.000	<3.00	-	<2.00	<3.00	7.000
20	Feb 01, 1993	14.000	0.540	<20<W	.12<T	.50<T	<1.0<W	350.000	8.300	<.05<W	.24<T	<.05<W	4.400
21	Mar 05, 1991	50.000	-	-	-	-	-	-	-	-	-	-	10.000
21	Mar 19, 1992	<2.00	70.000	<6.00	<10.00	-	-	978.000	10.000	-	<2.00	<3.00	9.000
21	May 03, 1993	57.000	0.740	<20<W	.28<T	.39<T	<1.0<W	770.000	12.000	<.05<W	1.300	<.05<W	7.700
22	Mar 05, 1991	20.000	-	-	-	-	-	-	-	-	-	-	<10.00
22	Mar 19, 1992	<1.00	29.000	<6.00	<10.00	-	-	521.000	<3.00	-	<2.00	4.000	6.000
22	May 03, 1993	22.000	1.100	<20<W	.12<T	0.620	<1.0<W	450.000	11.000	<.05<W	0.840	<.05<W	5.400
23	May 01, 1987	30.000	-	-	<.01	-	<.002	-	-	-	-	-	10.000
23	Mar 05, 1991	30.000	-	-	-	-	-	-	-	-	-	-	10.000
23	Mar 19, 1992	<1.00	46.000	<6.00	<10.00	-	-	624.000	<3.00	-	<2.00	4.000	8.000
23	Feb 01, 1993	38.000	0.630	<20<W	.16<T	0.540	<1.0<W	510.000	7.500	<.05<W	25<T	<.05<W	5.200
24	Apr 11, 1988	20.000	-	-	<10.00	-	<2.00	-	-	-	<.20	-	40.000
24	May 24, 1991	<10.00	-	-	-	-	-	-	-	-	-	-	10.000
24	May 03, 1993	25.000	0.660	<20<W	1.100	.47<T	<1.0<W	200.000	12.000	<.05<W	.31<T	<.05<W	4.900
25	Apr 11, 1988	30.000	-	-	<10.00	-	<2.00	-	-	-	<.20	-	20.000

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	Ag UG/L	Al UG/L	As UG/L	Ba UG/L	B UG/L	Be UG/L	Cd UG/L	Cn UG/L	Co UG/L	Cr UG/L	Cu UG/L	Fe UG/L	Hg UG/L
25	May 24, 1991	R	B	-	-	-	-	-	-	-	-	-	-	<10.00	90,000	-
26	Apr 11, 1988	R	B	<10.00	-	<1.00	70,000	<500	-	<1.00	<10.00	-	10,000	<10.00	230,000	-
26	Feb 01, 1993	R	B	<.05<W	6.100	34<T	75,000	18<T	<.05<W	<.05<W	-	.06<T	3.8<T	<.50<W	97,000	<.02<W
27	Apr 27, 1988	R	B	<1.00	-	2,000	40,000	50,000	-	<5.00	-	-	10,000	10,000	230,000	<20
28	June 1987	R	B	<1.00	-	<2.00	10,000	<500	-	<1.00	<20.00	-	<10.00	<10.00	30,000	<1.00
29	June 1987	R	B	<1.00	-	<2.00	30,000	<500	-	<1.00	<20.00	-	10,000	<10.00	30,000	<1.00
30	June 1987	R	B	<1.00	-	<2.00	10,000	<500	-	<1.00	<20.00	-	<10.00	<10.00	30,000	<1.00
32	June 1987	R	B	1,000	-	<2.00	30,000	400,000	-	<1.00	<20.00	-	<10.00	<10.00	20,000	<1.00
35	Jan 23, 1990	R	B	<10.00	-	<2.00	275,000	24,000	-	3,000	-	-	<5.00	-	-	<1.00

SITE #	DATE SAMPLED	Mn UG/L	Mo UG/L	Ni UG/L	Pb UG/L	Sb UG/L	Se UG/L	Sr UG/L	Ti UG/L	Tl UG/L	U UG/L	V UG/L	Zn UG/L
--------	-----------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	-----------	-----------	------------

25	May 24, 1991	10,000	-	-	-	-	-	-	-	-	-	-	20,000
26	Apr 11, 1988	40,000	-	-	<10.00	-	3,000	-	-	-	<.20	-	60,000
26	Feb 01, 1993	25,000	1,300	<.20<W	0.580	.48<T	<1.0<W	370,000	11,000	<.05<W	.18<T	<.05<W	5,900
27	Apr 27, 1988	100,000	-	-	-	-	<2.00	-	-	-	<1.00	-	50,000
28	June 1987	40,000	-	-	2,000	-	3,000	-	-	-	1,000	-	8,000
29	June 1987	30,000	-	-	<2.00	-	3,000	-	-	-	<1.00	-	5,000
30	June 1987	30,000	-	-	<2.00	-	<2.00	-	-	-	<1.00	-	4,000
32	June 1987	10,000	-	-	20,000	-	<2.00	-	-	-	<1.00	-	20,000
35	Jan 23, 1990	-	-	-	<10.00	-	<2.00	-	-	-	<1.00	-	-

APPENDIX V

WATER QUALITY DATA FOR OVERBURDEN WELLS

REMARK CODES FOR APPENDIX V

< value < W = No Measurable Response (Zero) : < Reported Value

value < T = A Measurable Trace Amount

< value < = Less Than Reported Value

U = Unknown

- = No Data

SAMPLE TYPE: R = Raw Water T = Treated Water

REPORT TYPE: B = Background Water Quality I = Water Quality Interference Investigation

LOCATIONS AND DESCRIPTIONS OF WATER QUALITY DATA POINTS
IN THE OVERBURDEN

SITE #	COUNTY	TOWNSHIP	CONC.	LOT	WELL NAME	WELL TYPE	DEPTH WATER FOUND (m)	MOE WELL #	UTM EASTING	UTM NORTHING
1	Peel	Caledon	HS W1	2	Inglewood Well # 1	M	5.2	-	587050	4850630
2	Peel	Caledon	HS W1	2	Inglewood Well # 2	M	4.9	-	587060	4850580
3	Peel	Caledon	HS W3	22	Alton Well # 1	M	17.4	-	576050	4857295
4	Peel	Caledon	HS W3	22	Alton Well # 2	M	14.6	-	576060	4857290
5	Peel	Caledon	HS W3	23	Alton Well # 3	M	-	-	576075	4858080
6	Peel	Caledon	HS W3	23	Alton Well # 4	M	-	-	576070	4858090
7	Peel	Caledon	HS W1	13	Caledon Well # 3	M	-	-	582070	4856350
8	Peel	Caledon	HS W1	13	Caledon Well # 4	M	-	-	582080	4856345
9	Halton	Esquesing	2	28	Acton, Prospect Park Well	M	-	-	576800	4830650
10	Halton	Esquesing	9	17	Georgetown Well # 1	M	13.7	-	587060	4832980
11	Halton	Esquesing	9	17	Georgetown Well # 2	M	-	-	587445	4832750
12	Halton	Esquesing	9	17	Georgetown Well # 3	M	-	-	587460	4832660
13	Halton	Esquesing	9	17	Georgetown Well # 4	M	-	-	587440	4832745
14	Halton	Esquesing	9	17	Georgetown Well # 4A	M	-	-	587450	4832755
15	Halton	Esquesing	9	16	Georgetown Well # 5	M	-	-	588145	4832955
16	Halton	Esquesing	9	16	Georgetown Well # 6	M	-	-	588140	4832945
17	Dufferin	Town of Orangeville			Orangeville Well # 5	M	-	-	569578	4862471
18	Dufferin	Town of Orangeville			Orangeville Well # 5A	M	-	-	569580	4862473
19	Dufferin	Mono	HS E 1	2	Island Lake Est.	M	57.9	-	574600	4865720
20	Dufferin	Mono	HS E 2	1	Coles Devl. Well # 1	M	18.3, 25.0	-	576170	4864480
21	Peel	Chinguacousy	HS W1	32	Private Well	P	22.9	1654	589045	4850175
22	Peel	Chinguacousy	HS W1	34	Private Well	P	40.5	1668	587095	4850200
23	Peel	Chinguacousy	HS W2	33	Private Well	P	1.8, 4.3	1737	586761	4847781
24	Peel	Chinguacousy	HS W4	29	Private Well	P	70.7	3868	586045	4841850
25	Peel	Chinguacousy	HS W5	24	Private Well	P	41.2	3164	588065	4842300
26	Peel	Chinguacousy	HS W6	18	Private Well	P	10.5	3082	590085	4837195
27	Peel	Chinguacousy	HS W6	21	Private Well	P	4.9, 7.6	3989	588095	4838800

SITE #	COUNTY	TOWNSHIP	CONC.	LOT	WELL NAME	WELL TYPE	DEPTH WATER FOUND (m)	MOE WELL #	UTM EASTING	UTM NORTHING
28	Peel	Chinguacousy	HS W6	27	Private Well	P	37.5	3286	586250	4841150
29	Peel	Chinguacousy	HS E1	34	Private Well	P	1.5	4351	588269	4850794
30	Peel	Chinguacousy	HS E3	33	Private Well	P	6.1	4082	589720	4851450
31	Peel	Chinguacousy	HS E5	33	Private Well	P	18.9	1498	591835	4854821
32	Peel	Caledon	HS W1	9	Private Well	P	14.0	4428	584030	4853780
33	Peel	Caledon	HS W1	10	Private Well	P	—	—	582810	4854320
34	Peel	Caledon	HS W1	26	Private Well	P	34.1	801	576180	4860921
35	Peel	Caledon	HS W2	11	Private Well	P	4.0	842	582090	4853870
36	Peel	Caledon	HS W2	16	Private Well	P	—	—	579110	4854860
37	Peel	Caledon	HS W2	17	Private Well	P	22.0	848	580044	4857098
38	Peel	Caledon	HS W2	26	Private Well	P	8.8	3272	576080	4860670
39	Peel	Caledon	HS W2	28	Private Well	P	35.7	4360	572095	4860933
40	Peel	Caledon	HS W3	8	Private Well	P	7.6	872	582080	4849255
41	Peel	Caledon	HS W3	8	Private Well	P	—	—	581270	4850710
42	Peel	Caledon	HS W3	15	Private Well	P	45.7	880	579100	4854035
43	Peel	Caledon	HS W3	25	Private Well	P	44.2	904	575052	4859323
44	Peel	Caledon	HS W4	14	Private Well	P	14.3	946	579090	4852800
45	Peel	Caledon	HS W4	18	Private Well	P	3.0 , 4.6	950	577067	4857645
46	Peel	Caledon	HS W4	29	Private Well	P	—	—	571890	4859220
47	Peel	Caledon	HS W4	31	Private Well	P	24.1	986	571050	4860600
48	Peel	Caledon	HS W5	6	Private Well	P	22.3	1000	582050	4848030
49	Peel	Caledon	HS W5	7	Private Well	P	14.6	1003	581085	4848400
50	Peel	Caledon	HS W5	15	Private Well	P	3.7	1027	576145	4851930
51	Peel	Caledon	HS E1	4	Private Well	P	34.1	3614	586090	4852580
52	Peel	Caledon	HS E1	11	Private Well	P	51.5	746	583030	4854740
53	Peel	Caledon	HS E2	3	Private Well	P	7.6	3165	587740	4853370
54	Peel	Caledon	HS E2	11	Private Well	P	41.8	3299	584095	4856135
55	Peel	Caledon	HS E3	2	Private Well	P	5.5	3129	588785	4854060
56	Peel	Caledon	HS E3	5	Private Well	P	33.5	3712	589050	4855735
57	Peel	Caledon	HS E3	7	Private Well	P	—	615	586045	4856135

SITE #	COUNTY	TOWNSHIP	CONC.	LOT	WELL NAME	WELL TYPE	DEPTH WATER FOUND (m)	MOE WELL #	UTM EASTING	UTM NORTHING
58	Peel	Caledon	HS E3	15	Private Well	P	1.5	3232	582750	4858870
59	Peel	Caledon	HS E4	1	Private Well	P	4.5	3396	589450	4853840
60	Peel	Caledon	HS E4	4	Private Well	P	3.7	637	588846	4856156
61	Peel	Caledon	HS E4	5	Private Well	P	—	—	588700	4856250
62	Peel	Caledon	HS E4	7	Private Well	P	29.9	4443	587765	4857081
63	Peel	Caledon	HS E4	8	Private Well	P	73.5	3179	587270	4857820
64	Peel	Caledon	HS E5	11	Private Well	P	25.0	3713	586350	4858940
65	Peel	Caledon	HS E6	1	Private Well	P	14.0	668	592246	4856537
66	Peel	Brampton (Ching.)	HS W3	5	Private Well	P	14.3	1775	597887	4834904
67	Peel	Brampton (Ching.)	HS W5	5	Private Well	P	3.4	3813	595940	4832230
68	Peel	Brampton (Ching.)	HS W5	15	Private Well	P	1.5	3275	592500	4837100
69	Peel	Brampton (Ching.)	HS W6	7	Private Well	P	13.4	4979	594040	4831870
70	Peel	Brampton (Toronto)	HS W4	15	Private Well	P	10.4	2676	598887	4830997
71	Peel	Brampton (Toronto)	HS W5	15	Private Well	P	—	—	598730	4830910
72	Peel	Brampton (Toronto)	HS W6	15	Private Well	P	20.4	3872	598020	4829480
73	Peel	Mississauga (Toronto)	HS W3	10	Private Well	P	6.1	2590	603118	4830361
74	Peel	Mississauga (Toronto)	HS W3	11	Private Well	P	19.2	2604	602219	4831079
75	Peel	Mississauga (Toronto)	HS W3	11	Private Well	P	25.6	2612	602360	4831215
76	Peel	Albion	1	17	Private Well	P	18.3	—	592650	4856280
77	Halton	Esquesing	4	28	Private Well	P	—	—	578860	4832530
78	Halton	Esquesing	7	16	Private Well	P	8.2	1124	586576	4831085
79	Halton	Esquesing	7	16	Private Well	P	6.1, 7.9	5270	586800	4830900
80	Halton	Esquesing	7	17	Private Well	P	6.7	1130	585474	4830856
81	Halton	Esquesing	7	17	Private Well	P	4.6	1128	585893	4831444
82	Halton	Esquesing	9	23	Private Well	P	—	—	585040	4836740
83	Halton	Esquesing	10	18	Private Well	P	15.2	2966	588360	4835200
84	Halton	Esquesing	11	1	Private Well	P	—	5235	596620	4829120
85	Halton	Esquesing	11	10	Private Well	P	—	—	592280	4832550
86	Wellington	Erin	7	22	Private Well	P	—	—	569300	4846860
87	Wellington	Erin	7	28	Private Well	P	—	—	567460	4849910

SITE #	COUNTY	TOWNSHIP	CONC.	LOT	WELL NAME	WELL TYPE	DEPTH WATER FOUND (m)	MOE WELL #	UTM EASTING	UTM NORTHING
88	Wellington	Erin	8	24	Private Well	P	6.4	-	569280	4848660
89	Wellington	Erin	8	24	Private Well	P	5.5	-	569710	4849200
90	Wellington	Erin	8	24	Private Well	P	9.1	-	569560	4849830
91	Wellington	Erin	9	15	OW1 -90	T	12.2	-	574650	4846245
92	Wellington	Erin	9	15	OW2 -90	T	11.6	-	574800	4846270
93	Wellington	Erin	9	15	OW3 -90	T	6.4	-	574750	4846525
94	Wellington	Erin	9	24	Private Well	P	6.4	-	570210	4849480
95	Wellington	Erin	10	13	Bel - Erin Subdv. TW #1	T	12.5	-	576340	4845840
96	Wellington	Erin	10	13	Bel - Erin Subdv. TW #2	T	11.3	-	576250	4845790
97	Wellington	Erin	10	23	Private Well	P	-	-	571990	4850440
98	Dufferin	Mono	HS W3	1	Private Well	P	3.0	-	569800	4862425
99	Dufferin	Mono	HS W3	3	Private Well	P	-	-	569640	4863625

TABLE REMARKS

WELL TYPE CODE

M = Municipal Water Supply

P = Private Water Supply

T = Test Well

UTM ZONE = 17

- = No Data

WATER QUALITY DATA: MAJOR CONVENTIONAL PARAMETERS FOR OVERBURDEN WELLS

(Concentrations in MG/L unless otherwise noted)

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
1	Jul 12, 1983	R	B	578.00	289.00	85.00	18.70	11.50	-	-	8.02	0.07	24.60	30.50	0.40
1	Jan 24, 1984	R	B	515.00	249.70	70.00	18.20	12.00	-	202.60	8.22	0.07	27.00	33.00	1.00
1	May 14, 1984	R	B	556.00	281.70	81.00	19.30	11.20	-	236.40	7.87	0.06	24.00	28.00	0.51
1	Sep 17, 1984	R	B	537.00	276.70	79.00	19.30	11.90	-	247.00	7.44	0.08	24.60	28.00	0.10
1	Dec 18, 1985	R	B	593.00	295.00	85.00	20.20	12.30	1.45	240.00	8.45	0.06	29.00	27.00	.16<T
1	Apr 24, 1986	R	B	562.00	280.50	80.90	19.10	11.60	1.39	256.60	8.33	0.05	24.40	25.80	.09<T
1	Dec 17, 1986	R	B	586.00	259.00	69.80	20.60	20.90	1.59	220.60	8.17	0.07	44.50	30.80	1.47
1	Oct 14, 1986	R	B	643.00	339.00	100.00	21.50	12.10	1.77	295.00	8.29	0.06	27.00	22.50	.19<T
1	Dec 21, 1987	R	B	552.00	280.00	78.20	20.60	13.20	1.50	210.00	8.43	.04<T	32.20	31.40	0.19
1	May 17, 1988	R	B	629.00	294.00	85.60	19.60	14.00	1.25	256.60	8.05	0.05	35.60	30.60	.06<T
1	Dec 22, 1988	R	B	680.00	352.00	107.00	20.50	15.00	1.55	274.00	8.19	.04<T	44.30	42.62	0.61
1	Apr 02, 1990	R	B	671.00	297.00	81.40	22.80	16.40	1.60	253.70	8.20	.04<T	44.20	34.40	.12<T
1	May 22, 1990	U	B	668.00	318.00	91.70	21.60	17.10	1.48	251.90	8.30	0.06	50.10	34.92	0.49
1	Nov 19, 1990	R	B	661.00	323.90	94.50	21.40	16.80	1.67	251.90	7.91	0.06	45.70	35.06	0.30
1	Jan 31, 1991	R	B	742.00	375.00	108.90	25.05	17.00	1.76	286.20	8.02	0.06	60.90	37.64	-
1	Jan 31, 1991	T	B	745.00	379.00	110.00	25.30	17.40	1.82	289.80	8.11	0.06	61.30	38.19	-
1	May 01, 1991	R	B	-	359.60	104.40	24.00	15.40	1.52	-	-	.02<T	52.70	42.83	.09<T
1	Jun 18, 1991	R	B	738.00	280.60	74.00	23.20	16.40	1.85	219.50	8.13	.04<T	52.20	36.11	0.27
1	Oct 09, 1991	T	B	662.00	308.20	90.10	20.20	18.00	1.76	259.60	8.54	.04<T	40.90	40.50	0.11
1	Mar 02, 1992	R	B	693.00	327.40	93.50	22.80	18.80	1.49	261.00	8.32	.04<T	49.20	19.90	0.39
1	May 27, 1992	R	B	690.00	311.70	87.80	22.45	18.40	1.59	254.10	8.20	.04<T	49.20	44.25	0.51
1	Jan 27, 1993	R	B	707.00	390.00	114.60	25.20	16.50	1.58	303.00	8.11	.04<T	49.50	37.44	0.12
1	Mar 10, 1993	R	B	724.00	398.00	113.80	27.65	17.20	1.67	297.90	7.93	.04<T	52.60	41.60	-
1	Jun 02, 1993	R	B	668.00	359.20	106.10	22.90	16.90	1.58	290.00	8.07	0.06	48.00	37.59	-
2	Jul 07, 1982	R	B	602.00	300.20	90.00	18.40	11.20	1.45	266.00	8.12	0.07	23.00	27.00	0.37
2	Dec 14, 1982	R	B	634.00	317.00	95.00	19.40	12.40	1.50	230.80	8.08	0.07	30.20	31.50	-
2	Jul 12, 1983	R	B	583.00	296.10	88.00	18.60	10.50	-	-	7.62	0.07	22.60	30.50	0.30

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
1	Jul 12, 1983	.1<W	-	-	-	.1<W	-	-	-	1.40	-	-
1	Jan 24, 1984	6.7	-	-	-	.1<W	1.100	-	-	1.70	-	-
1	May 14, 1984	2.5	-	-	-	.1<W	1.100	-	-	1.20	-	-
1	Sep 17, 1984	2.5	-	-	-	<.05<W	0.450	-	-	1.10	-	-
1	Dec 18, 1985	5<T	<.010<W	-	-	<.05<W	0.600	<.005<W	-	1.00	-	-
1	Apr 24, 1986	1.5<T	.040<T	-	-	.05<T	0.850	<.005<W	-	.4<T	-	-
1	Dec 17, 1986	3.0	<.01<W	-	-	<.05<W	2.<T	.015<T	-	-	-	-
1	Oct 14, 1986	1<T	<.020<W	-	-	<.05<W	0.700	.005<T	-	1.10	-	-
1	Dec 21, 1987	1.0<T	.020<T	-	-	<.05<W	0.700	<.005<W	-	-	-	-
1	May 17, 1988	1.5<T	.10<T	-	-	.10<T	0.900	.005<T	-	0.90	-	-
1	Dec 22, 1988	1.0<T	.02<T	-	-	.05<T	0.750	.005<T	-	0.90	-	-
1	Apr 02, 1990	5<T	.02<T	-	-	<.05<W	1.050	<.005<W	-	1.00	-	-
1	May 22, 1990	2.0<T	.02<W	-	-	.05<T	0.650	.005<T	-	1.10	-	-
1	Nov 19, 1990	1.0<T	.02<T	-	-	<.05<W	0.600	.005<T	-	1.20	-	-
1	Jan 31, 1991	-	.04<T	-	-	-	0.800	.005<W	-	-	-	-
1	Jan 31, 1991	-	<.02<W	-	-	-	0.750	<.005<W	-	-	-	-
1	May 01, 1991	5<T	<.02<W	-	-	<.05<W	-	-	-	0.80	-	-
1	Jun 18, 1991	1.5	.02<T	-	-	.05<T	0.500	.010<T	-	1.30	-	-
1	Oct 09, 1991	1.0<T	0.011	0.0095	.90<T	<.002<W	0.380	<.0010<W	<.2<W	1.30	-	-
1	Mar 02, 1992	<.5<W	.02<T	-	-	<.05<W	0.700	.005<T	-	1.30	-	-
1	May 27, 1992	2.0	<.02<W	-	-	.05<T	0.350	<.005<W	-	1.20	-	-
1	Jan 27, 1993	1.5	.04<T	-	-	<.05<W	0.650	<.005<W	-	1.20	-	-
1	Mar 10, 1993	1.0<T	.02<T	-	-	<.05<W	0.750	.005<T	-	1.10	-	-
1	Jun 02, 1993	1.0<T	<.02<W	-	-	<.05<W	0.400	.005<T	-	1.20	-	-
2	Jul 07, 1982	3.5	.01<W	-	-	.1<W	0.600	.01<T	-	0.70	-	-
2	Dec 14, 1982	-	-	-	-	-	0.600	-	-	0.60	-	-
2	Jul 12, 1983	.1<W	-	-	-	.1<W	-	-	-	1.50	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
2	Dec 19, 1983	R	B	638.00	310.00	91.50	19.80	12.00	-	269.00	8.03	0.07	28.80	33.50	0.70
2	Oct 14, 1986	R	B	596.00	299.00	84.30	21.50	11.90	1.79	261.00	8.19	0.07	26.75	22.10	.14<T
2	Dec 17, 1986	R	B	602.00	284.00	80.50	20.10	11.80	1.58	270.80	8.31	0.07	27.80	25.90	0.23
2	Dec 21, 1987	R	B	591.00	275.00	75.80	20.80	13.20	1.50	232.40	8.39	.04<T	32.10	31.00	0.19
2	May 17, 1988	R	B	680.00	312.00	93.60	19.10	19.20	1.30	277.40	8.05	0.06	41.60	30.80	0.20
2	Dec 22, 1988	R	B	686.00	342.00	104.00	20.10	15.40	1.55	274.70	8.17	.04<T	44.80	44.56	0.83
2	Apr 02, 1990	R	B	669.00	257.00	66.20	22.40	16.00	1.55	252.90	8.20	.04<T	44.20	35.16	0.42
2	May 22, 1990	U	B	741.00	315.50	91.30	21.25	26.50	1.40	258.90	8.16	0.06	63.20	42.98	0.70
2	Nov 19, 1990	R	B	777.00	376.40	112.30	23.30	21.30	1.61	292.10	7.84	0.06	66.40	39.24	0.46
2	May 01, 1991	R	B	-	368.90	109.30	23.30	18.20	1.43	-	-	0.06	55.30	43.67	.15<T
2	Jun 18, 1991	R	B	684.00	270.00	73.00	21.40	16.00	1.55	225.90	8.14	0.06	36.50	29.76	1.11
2	Mar 02, 1992	R	B	699.00	328.60	94.00	22.80	18.80	1.50	261.90	8.25	.04<T	49.60	41.15	0.87
2	May 27, 1992	R	B	692.00	307.60	84.50	23.50	17.90	1.49	233.40	8.29	0.06	49.40	44.33	2.40
2	Jan 27, 1993	R	B	705.00	393.70	116.80	24.80	16.30	1.57	303.20	8.18	.04<T	49.40	37.67	-
2	Mar 10, 1993	R	B	723.00	382.30	11.30	25.35	17.00	1.66	296.00	7.78	.04<T	52.70	41.28	0.12
2	Jun 02, 1993	R	B	666.00	362.00	106.90	23.10	17.30	1.59	289.80	8.06	0.06	47.70	37.15	0.11
3	Jul 07, 1982	R	B	685.00	305.10	86.00	22.00	26.90	2.20	286.80	8.01	0.04	42.20	18.00	0.31
3	Jul 12, 1983	R	B	682.00	304.60	85.00	22.50	23.00	-	-	7.62	0.05	38.60	23.00	0.27
3	Jan 24, 1984	R	B	663.00	290.00	76.00	24.50	21.50	-	266.80	-	0.03	34.00	21.50	0.42
3	May 14, 1984	R	B	697.00	336.30	91.00	26.50	27.60	-	281.40	7.60	0.04	45.80	21.50	0.18
3	Sep 17, 1984	R	B	610.00	301.60	84.50	22.00	23.50	-	274.80	7.59	0.06	39.40	19.00	1.18
3	Dec 18, 1985	R	B	610.00	275.00	73.00	22.50	24.70	1.65	225.80	7.91	0.05	41.80	17.00	.07<T
3	Apr 23, 1986	R	B	650.00	292.00	77.00	24.20	26.80	1.77	285.60	8.22	0.04	39.70	17.25	.14<T
3	Dec 17, 1986	R	B	549.00	238.50	60.30	21.30	26.40	1.77	218.30	8.21	.05<T	40.00	14.10	.21
3	Jan 24, 1986	R	B	575.00	287.70	74.00	25.00	10.00	1.20	240.20	7.54	0.08	18.20	40.00	.47<T
3	Dec 21, 1987	R	B	729.00	288.00	74.20	24.80	39.80	2.10	246.30	8.08	.04<T	74.50	19.20	.05<T
3	May 16, 1988	R	B	792.00	350.00	99.80	24.40	30.80	1.85	311.50	7.92	.04<T	61.20	19.40	.08<T
3	Dec 22, 1988	R	B	872.00	373.00	107.00	25.80	45.20	2.15	308.20	8.16	.02<T	93.40	21.06	0.53
3	Apr 02, 1990	R	B	1081.00	423.00	119.00	30.40	61.20	2.25	336.10	8.20	.02<T	125.00	25.90	0.43
3	May 22, 1990	R	B	1054.00	335.10	96.20	27.95	77.50	2.71	291.30	7.99	.04<T	142.00	25.42	0.29

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
2	Dec 19, 1983	.4<T	-	-	.2<T	.1<W	0.400	-	-	0.60	-	-
2	Oct 14, 1986	1<T	<.020<W	-	.20<T	<.05<W	0.700	.005<T	-	0.60	-	-
2	Dec 17, 1986	1<T	<.01<W	-	<.05<W	<.05<W	2<T	.005<T	-	-	-	-
2	Dec 21, 1987	1.0<T	.020<T	-	<.05<W	<.05<W	0.700	<.005<W	-	-	-	-
2	May 17, 1988	1.5<T	<.02<W	-	.10<T	.10<T	0.800	.005<T	-	0.70	-	-
2	Dec 22, 1988	.5<T	.02<T	-	.20<T	.05<T	0.750	.010<T	-	0.90	-	-
2	Apr 02, 1990	.5<T	.02<T	-	<.05<W	<.05<W	1.050	<.005<W	-	1.00	-	-
2	May 22, 1990	1.0<T	<.02<W	-	<.05<W	<.05<W	0.250	<.005<W	-	0.70	-	-
2	Nov 19, 1990	<.5<W	.02<T	-	.10<T	<.05<W	0.500	<.005<W	-	0.60	-	-
2	May 01, 1991	<.5<W	<.02<W	-	.05<T	-	-	-	-	0.60	-	-
2	Jun 18, 1991	.5<T	.02<T	-	.10<T	.05<T	0.550	.010<T	-	0.70	-	-
2	Mar 02, 1992	1.0<T	<.02<W	-	.15<T	<.05<W	0.700	.010<T	-	1.20	-	-
2	May 27, 1992	2.0	<.02<W	-	.20<T	.05<T	0.350	.005<T	-	2.10	-	-
2	Jan 27, 1993	1.5	.04<T	-	.10<T	<.05<W	0.600	<.005<W	-	0.80	-	-
2	Mar 10, 1993	.5<T	.02<T	-	.15<T	<.05<W	0.750	.005<T	-	1.00	-	-
2	Jun 02, 1993	1.0<T	<.02<W	-	.10<T	<.05<W	0.400	.005<T	-	1.20	-	-
3	Jul 07, 1982	.5<T	.01<W	-	.2<T	.1<W	2.500	.01<T	-	0.70	-	-
3	Jul 12, 1983	1<W	-	-	.3<T	.1<W	-	-	-	1.20	-	-
3	Jan 24, 1984	1.9	-	-	.1<T	.1<W	2.000	-	-	1.10	-	-
3	May 14, 1984	1.5	-	-	.3<T	.1<W	2.400	-	-	1.00	-	-
3	Sep 17, 1984	2.0	-	-	.15<T	.10<T	2.000	-	-	1.00	-	-
3	Dec 18, 1985	.5<T	.020<T	-	.20<T	.05<T	0.450	<.005<W	-	1.10	-	-
3	Apr 23, 1986	.5<T	<.002<W	-	.20<T	<.05<W	2.000	<.005<W	-	0.60	-	-
3	Dec 17, 1986	2<T	<.01<W	-	<.05<W	<.05<W	1.450	.01<T	-	-	-	-
3	Jan 24, 1986	3.5	-	-	<.10<W	<.05<W	0.750	.01<T	<.2<W	0.60	-	-
3	Dec 21, 1987	.5<T	.020<T	-	.10<T	<.05<W	2.750	<.005<W	-	-	-	-
3	May 16, 1988	.5<T	<.02<W	-	.15<T	.10<T	3.150	.005<T	-	0.70	-	-
3	Dec 22, 1988	<.5<W	<.02<W	-	.15<T	.05<T	3.350	.010<T	-	0.80	-	-
3	Apr 02, 1990	<.5<W	.02<T	-	<.05<W	<.05<W	5.800	<.005<W	-	0.70	-	-
3	May 22, 1990	.5<T	.02<W	-	.05<T	.05<T	5.800	<.003<W	-	0.90	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
3	Nov 19, 1990	R	B	1037.00	378.10	103.80	29.25	65.80	2.19	314.40	8.05	.02<T	130.00	25.04	0.33
3	May 01, 1991	R	B	-	440.90	125.50	31.00	72.30	2.37	-	-	<.01<W	150.00	40.96	.11<T
3	Jun 18, 1991	R	B	1127.00	397.60	114.90	26.80	73.70	2.49	337.60	8.09	.02<T	142.00	26.73	0.93
3	Oct 08, 1991	T	B	1119.00	398.80	112.50	28.60	74.70	2.26	336.60	8.55	0.4<T	144.00	28.74	0.13
3	Mar 02, 1992	R	B	1085.00	400.30	112.60	28.95	71.50	2.40	329.30	8.27	.02<T	139.00	28.03	0.26
3	May 27, 1992	R	B	1131.00	326.30	80.40	30.50	82.60	2.45	228.60	8.16	0.10	177.00	29.33	0.40
3	Jan 25, 1993	R	B	1056.00	421.00	133.00	30.10	78.20	2.42	357.00	7.97	.02<T	137.00	29.46	0.09
3	Mar 18, 1993	R	B	1046.00	431.90	121.80	31.05	76.90	2.23	354.70	7.72	.04<T	129.00	28.94	.04<T
3	Jun 02, 1993	R	B	984.00	392.60	110.10	28.60	82.20	2.22	331.60	7.98	.02<T	140.00	26.29	0.08
4	Dec 19, 1983	R	B	-	-	-	26.00	21.70	-	247.80	-	0.05	36.20	22.00	-
4	Jan 24, 1984	R	B	679.00	318.10	87.00	24.50	21.50	-	289.00	-	0.03	34.20	21.00	0.36
4	May 14, 1984	R	B	691.00	340.90	92.00	27.00	26.30	-	284.20	7.59	0.04	43.40	21.00	0.12
4	Sep 17, 1984	R	B	621.00	296.60	82.50	22.00	24.20	-	278.00	7.60	0.04	40.60	21.00	0.23
4	Dec 18, 1985	R	B	631.00	282.00	76.00	22.50	25.00	1.65	229.40	7.92	0.04	42.60	17.00	.06<T
4	Jan 29, 1986	R	B	592.00	294.00	75.00	26.00	11.00	1.25	242.60	7.51	0.06	22.80	41.00	.39<T
4	Apr 23, 1986	R	B	656.00	300.00	82.60	22.80	23.90	1.74	287.40	8.23	0.04	41.60	17.15	.13<T
4	Oct 14, 1986	R	B	605.00	262.00	68.10	22.30	26.40	1.89	228.20	8.12	.04<T	49.50	15.60	.16<T
4	Dec 17, 1986	R	B	551.00	233.00	58.50	21.10	26.60	1.78	214.60	8.21	.05<T	41.60	14.70	0.11
4	Dec 21, 1987	R	B	695.00	253.00	61.20	24.40	39.00	2.15	218.50	8.18	.02<T	77.00	19.00	0.60
4	May 16, 1988	R	B	748.00	326.00	90.80	24.00	27.60	1.95	303.10	8.06	.04<T	52.60	18.60	0.27
4	Dec 22, 1988	R	B	828.00	379.00	109.00	25.80	38.20	2.10	309.70	8.15	.02<T	81.80	20.78	1.02
4	Apr 02, 1990	R	B	1107.00	422.00	123.00	30.90	64.20	2.30	333.70	8.22	.02<T	137.00	25.77	0.48
4	May 22, 1990	R	B	963.00	360.80	97.90	28.25	55.00	2.23	298.30	8.02	0.4<T	117.00	23.01	0.27
4	Nov 19, 1990	R	B	1064.00	387.70	106.90	29.35	67.90	2.32	327.40	7.87	.02<T	130.00	24.50	0.37
4	May 01, 1991	R	B	-	444.90	125.30	32.10	77.10	2.39	-	-	.02<T	147.00	38.16	.11<T
4	Jun 18, 1991	R	B	1125.00	402.60	114.50	28.25	72.20	2.31	339.10	8.07	.02<T	142.00	26.68	0.50
4	Mar 02, 1992	R	B	1083.00	399.10	112.20	28.90	67.40	2.30	338.70	8.20	.02<T	133.00	27.99	0.40
4	May 27, 1992	R	B	1117.00	357.60	92.50	30.75	2<T	2.17	268.00	8.11	.04<T	177.00	28.63	0.29
4	Mar 18, 1993	R	B	-	425.30	120.40	30.30	78.30	2.36	-	-	.02<T	126.00	32.20	-
4	Jun 02, 1993	R	B	978.00	353.60	94.70	28.45	79.90	2.18	313.30	8.05	.02<T	138.00	26.11	-

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
3	Nov 19, 1990	<.5<W	.04<T	-	.15<T	<.05<W	5.700	<.005<W	-	0.80	-	-
3	May 01, 1991	-	.02<T	-	.05<T	-	-	-	-	1.00	-	-
3	Jun 18, 1991	<.5<W	<.02<W	-	.15<T	.05<T	5.900	.010<T	-	0.90	-	-
3	Oct 08, 1991	.5<T	<.002<W	.0010<T	.11<T	<.002<W	6.300	<.0010<W	<.2<W	0.90	-	-
3	Mar 02, 1992	.5<T	.02<T	-	.15<T	<.05<W	5.900	.010<T	-	0.90	-	-
3	May 27, 1992	13.5	<.02<W	-	.20<T	.10<T	6.800	<.005<W	-	0.70	-	-
3	Jan 25, 1993	1.0<T	<.02<W	-	.10<T	.05<T	6.700	<.005<W	-	1.00	-	-
3	Mar 18, 1993	<.5<W	.02<T	-	.10<T	<.05<W	6.350	<.005<W	-	0.80	-	-
3	Jun 02, 1993	<.5<W	<.02<W	-	.15<T	<.05<W	5.750	<.005<W	-	0.80	-	-
4	Dec 19, 1983	.1<W	-	-	.2<T	.1<W	2.100	-	-	0.80	-	-
4	Jan 24, 1984	1.5	-	-	.1<T	.1<W	2.100	-	-	0.80	-	-
4	May 14, 1984	1.5	-	-	.2<T	.1<W	2.300	-	-	0.90	-	-
4	Sep 17, 1984	1.0	-	-	.20<T	.10<T	2.200	-	-	1.00	-	-
4	Dec 18, 1985	<.5<W	<.010<W	-	.20<T	.05<T	0.700	<.005<W	-	1.00	-	-
4	Jan 29, 1986	3	-	-	<.1<W	<.05<W	0.850	<.005<W	<.2<W	0.70	-	-
4	Apr 23, 1986	.5<T	<.020<W	-	.20<T	<.05<W	1.700	<.005<W	-	0.60	-	-
4	Oct 14, 1986	1<T	<.002<W	-	.2<T	.1<T	2.100	<.005<W	-	-	-	-
4	Dec 17, 1986	1<T	<.01<W	-	<.05<W	<.05<W	1.250	.005<T	-	-	-	-
4	Dec 21, 1987	<.5<W	.020<T	-	.10<T	<.05<W	2.900	<.005<W	-	-	-	-
4	May 16, 1988	.5<T	<.02<W	-	.20<T	.10<T	2.650	.005<T	-	0.70	-	-
4	Dec 22, 1988	<.5<W	<.02<W	-	.20<T	.05<T	3.250	.010<T	-	0.80	-	-
4	Apr 02, 1990	.5<T	<.02<W	-	<.05<W	.05<T	5.950	<.005<W	-	0.70	-	-
4	May 22, 1990	<.5<W	<.002<W	-	.1<T	<.05<W	5.050	<.005<W	-	0.80	-	-
4	Nov 19, 1990	<.5<W	.02<T	-	.15<T	<.05<W	5.700	<.005<W	-	0.70	-	-
4	May 01, 1991	1.0<T	.02<T	-	.10<T	-	-	-	-	0.80	-	-
4	Jun 18, 1991	<.5<W	<.02<W	-	.15<T	.05<T	5.800	.005<T	-	1.00	-	-
4	Mar 02, 1992	.5<T	.02<T	-	.15<T	<.05<W	5.750	.005<T	-	1.00	-	-
4	May 27, 1992	<.5<W	<.02<W	-	.20<T	.10<T	6.650	<.005<W	-	0.50	-	-
4	Mar 18, 1993	.10<T	.04<T	-	.15<T	<.05<W	-	.005<T	-	1.10	-	-
4	Jun 02, 1993	.5<T	<.02<W	-	.15<T	<.05<W	5.950	<.005<W	-	0.90	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
5	Dec 21, 1987	R	B	423.00	217.00	49.20	23.00	5.00	1.10	184.90	8.30	0.06	4.80	37.00	4.00
5	Feb 04, 1988	R	B	504.00	265.00	68.20	23.10	6.60	1.10	232.80	8.30	0.08	7.50	37.00	2.10
5	May 16, 1988	R	B	599.00	270.00	68.00	24.30	13.60	1.40	251.40	8.24	0.05	26.70	39.00	0.11
5	Dec 22, 1988	R	B	515.00	268.00	71.00	22.20	8.60	1.35	237.30	8.16	.04<T	11.70	39.20	1.02
5	Apr 02, 1990	R	B	648.00	300.00	84.00	24.80	16.40	1.65	254.50	8.29	.04<T	34.70	40.17	0.28
5	May 22, 1990	R	B	491.00	243.20	60.60	22.35	7.00	1.31	217.00	8.22	0.06	10.10	38.94	0.41
5	Nov 19, 1990	R	B	696.00	312.70	81.70	26.45	22.10	1.82	265.60	8.00	0.4<T	48.30	37.32	0.31
5	May 01, 1991	R	B	-	378.90	99.90	31.45	40.60	2.18	-	-	.02<T	97.50	55.55	0.26
5	Jun 18, 1991	R	B	1007.00	374.50	97.30	31.65	51.20	2.66	248.00	8.08	.04<T	144.00	43.89	0.43
5	Oct 08, 1991	T	B	758.00	315.80	83.10	26.30	31.90	1.97	267.50	8.62	0.4<T	64.00	38.88	0.12
5	Mar 02, 1991	R	B	1520.00	505.10	120.40	49.65	104.00	8.72	341.00	8.18	0.4<T	262.00	49.47	0.72
5	May 27, 1992	R	B	599.00	268.00	66.10	25.00	5<T	1.72	191.10	8.25	0.06	35.50	37.37	0.63
5	Jan 25, 1993	R	B	1004.00	406.00	108.00	33.20	66.40	3.15	307.70	7.99	0.4<T	142.00	45.29	0.36
5	Mar 10, 1993	R	B	621.00	309.70	81.90	25.50	25.20	2.06	256.90	8.08	0.06	38.60	41.05	23.10
5	Jun 02, 1993	R	B	650.00	300.90	80.70	24.10	34.70	2.21	257.40	8.10	0.06	51.60	39.78	0.18
6	Oct 14, 1986	R	B	-	282.50	76.60	22.10	30.30	1.85	248.90	8.12	.05<T	57.00	15.60	.65<T
6	Dec 21, 1987	R	B	426.00	220.00	50.00	23.00	4.80	1.00	187.10	8.26	0.06	3.90	36.40	11.90
6	Feb 04, 1988	R	B	491.00	263.00	67.60	22.90	6.00	1.10	225.10	8.22	0.06	7.60	36.80	1.77
6	May 16, 1988	R	B	482.00	228.00	56.40	21.20	4.80	1.00	229.50	8.17	0.05	3.50	35.00	2.70
6	Dec 22, 1988	R	B	449.00	234.00	57.40	21.90	4.80	1.00	210.90	8.17	0.06	4.30	39.58	1.11
6	Apr 02, 1990	R	B	482.00	256.00	66.40	21.80	4.00	1.00	228.30	8.33	.04<T	5.40	33.77	3.50
6	May 22, 1990	R	B	486.00	248.40	62.20	22.60	4.90	0.99	223.80	8.19	0.14	5.70	38.27	2.50
6	Nov 19, 1990	R	B	606.00	297.80	79.40	24.20	13.70	1.49	249.10	8.01	0.06	26.50	35.86	0.50
6	May 01, 1991	R	B	-	247.90	62.70	22.20	4.60	1.02	-	-	.04<T	6.60	45.70	.18<T
6	Jun 18, 1991	R	B	597.00	279.40	75.50	22.00	15.60	1.52	245.40	8.18	0.06	30.00	36.69	0.82
6	Mar 02, 1992	R	B	492.00	258.80	67.10	22.15	4.80	1.11	230.70	8.35	.04<T	6.10	36.11	0.67
6	May 27, 1992	R	B	473.00	241.40	59.90	22.30	6.00	1.00	220.10	8.24	0.06	9.70	32.27	2.80
6	Jan 25, 1993	R	B	651.00	310.00	81.40	26.00	25.00	1.81	250.60	8.08	.04<T	51.10	38.40	0.90
6	Mar 10, 1993	R	B	733.00	320.40	90.40	23.00	36.40	2.08	267.10	7.94	.04<T	69.00	41.00	0.26
6	Jun 02, 1993	R	B	476.00	261.00	66.60	23.05	7.60	1.18	229.70	8.17	0.06	9.00	37.67	-

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
5	Dec 21, 1987	7.5	.030<T	-	.10<T	.05<T	.15<T	<.005<W	-	-	-	-
5	Feb 04, 1988	4.5	0.080	-	.10<T	.05<T	0.250	<.005<W	<1.0<W	3<T	-	-
5	May 16, 1988	5<T	<.02<W	-	<.05<W	.10<T	0.700	0.040	-	0.50	-	-
5	Dec 22, 1988	2.5	<.02<W	-	.10<T	.05<T	.15<T	.005<T	-	0.50	-	-
5	Apr 02, 1990	5<T	.02<T	-	<.05<W	.05<T	1.250	0.035	-	0.50	-	-
5	May 22, 1990	1.5<T	<.02<W	-	<.05<W	<.05<W	<.05<W	.003<T	-	0.50	-	-
5	Nov 19, 1990	<.5<W	.02<T	-	.15<T	<.05<W	1.400	0.030	-	0.60	-	-
5	May 01, 1991	5<T	.02<T	-	.10<T	-	-	-	-	0.60	-	-
5	Jun 18, 1991	<.5<W	<.02<W	-	.15<T	.05<T	4.050	0.030	-	0.80	-	-
5	Oct 08, 1991	1.5	.004<T	.0010<T	.070<T	<.002<W	1.810	<.0010<W	<.2<W	0.50	-	-
5	Mar 02, 1991	<.5<W	<.02<W	-	.15<T	<.05<W	2.450	.005<T	-	0.80	-	-
5	May 27, 1992	<.5<W	<.02<W	-	.10<T	.10<T	0.800	.010<T	-	1.60	-	-
5	Jan 25, 1993	1.0<T	<.02<W	-	.05<T	.05<T	4.650	<.005<W	-	0.90	-	-
5	Mar 10, 1993	14.0	<.02<W	-	.05<T	.05<T	.05<T	.005<T	-	0.60	-	-
5	Jun 02, 1993	5<T	<.02<W	-	.10<T	<.05<W	1.150	.015<T	-	0.60	-	-
6	Oct 14, 1986	1.5<T	.02<W	-	2<T	.1<T	2.350	.005<T	-	-	-	-
6	Dec 21, 1987	30.0	.030<T	-	<.05<W	.05<T	.15<T	<.005<W	-	-	-	-
6	Feb 04, 1988	4.5	0.070	-	<.05<W	.05<T	0.250	<.005<W	<1.0<W	3<T	-	-
6	May 16, 1988	2.0<T	<.02<W	-	<.05<W	.10<T	.20<T	.005<T	-	.4<T	-	-
6	Dec 22, 1988	4.5	<.02<W	-	.10<T	.05<T	.15<T	.005<T	-	.4<T	-	-
6	Apr 02, 1990	6.0	.02<T	-	<.05<W	<.05<W	.05<T	<.005<W	-	.4<T	-	-
6	May 22, 1990	4.5	.02<W	-	<.05<W	<.05<W	<.05<W	<.005<W	-	-	-	-
6	Nov 19, 1990	5<T	<.02<W	-	<.05<W	<.05<W	0.800	0.025	-	0.50	-	-
6	May 01, 1991	5<T	.02<T	-	<.05<W	-	-	-	-	3<T	-	-
6	Jun 18, 1991	5<T	.02<T	-	.10<T	.05<T	0.750	0.025	-	0.60	-	-
6	Mar 02, 1992	1.0	<.02<W	-	.05<T	<.05<W	.05<T	.015<T	-	0.60	-	-
6	May 27, 1992	5<T	<.02<W	-	.10<T	.10<T	<.05<W	<.005<W	-	1.00	-	-
6	Jan 25, 1993	1.0	<.02<W	-	.05<T	.05<T	1.450	.005<T	-	0.60	-	-
6	Mar 10, 1993	5<T	<.02<W	-	.10<T	<.05<W	1.600	0.030	-	0.60	-	-
6	Jun 02, 1993	5<T	<.02<W	-	.10<T	<.05<W	<.05<W	<.005<W	-	0.50	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
7	Apr 07, 1983	R	B	416.00	204.80	-	-	7.00	1.33	173.20	7.98	0.06	16.20	-	0.88
7	Jul 12, 1983	R	B	409.00	191.90	54.50	13.60	7.60	-	142.60	8.00	0.07	17.80	24.00	0.25
7	Dec 19, 1983	R	B	381.00	184.20	51.50	13.50	8.00	-	158.20	8.60	0.07	17.20	21.00	5.20
7	Sep 17, 1984	R	B	394.00	186.70	53.00	13.20	7.70	-	159.40	8.16	0.07	17.60	20.50	0.50
7	Sep 17, 1984	R	B	369.00	180.40	50.00	13.50	7.60	-	160.60	7.82	0.08	15.80	20.00	0.17
7	Dec 18, 1985	R	B	377.00	175.00	48.80	12.90	18.10	1.25	152.00	8.28	0.08	16.00	19.00	.09<T
7	Apr 23, 1986	R	B	374.00	179.00	50.00	13.10	9.10	1.47	156.80	8.35	0.08	17.64	19.15	.15<T
7	Oct 14, 1986	R	B	380.00	182.50	50.90	13.50	8.20	1.34	157.10	8.41	0.07	16.70	17.90	.04<T
7	Dec 17, 1986	R	B	387.00	179.50	50.80	12.80	8.50	1.22	159.30	8.45	0.08	18.80	19.50	.05<T
7	May 17, 1988	R	B	395.00	181.00	51.00	13.10	8.60	1.25	163.70	8.21	0.06	18.20	18.20	.07<T
7	Dec 22, 1988	R	B	398.00	194.00	55.00	13.90	9.00	1.20	168.00	8.25	0.06	19.30	21.22	0.40
7	Apr 02, 1990	R	B	418.00	193.00	53.60	14.20	9.20	1.30	166.50	8.33	0.06	21.20	22.02	5.20
7	May 22, 1990	R	B	409.00	193.00	53.60	14.45	9.40	1.22	-	-	0.14	22.90	21.86	0.72
7	Nov 19, 1990	R	B	403.00	196.30	54.80	14.45	9.70	1.35	156.10	8.20	0.06	24.40	19.13	0.51
7	Jan 31, 1991	R	B	412.00	202.00	57.20	14.40	9.60	1.33	164.80	8.19	0.06	25.30	19.54	-
7	Jan 31, 1991	T	B	415.00	203.40	57.90	14.30	10.30	1.29	166.10	8.19	0.06	25.80	19.47	-
7	Jun 18, 1991	R	B	420.00	176.20	48.10	13.60	11.60	1.21	149.50	8.27	0.06	27.70	19.90	.20<T
7	Oct 08, 1991	T	B	427.00	191.90	53.80	14.00	12.00	1.36	164.70	8.66	0.06	28.40	19.44	0.13
7	Mar 02, 1992	R	B	505.00	260.00	67.70	22.10	6.90	1.20	231.70	8.35	.04<T	10.90	34.49	1.30
7	May 27, 1992	R	B	413.00	184.90	51.20	13.85	13.10	1.15	152.90	8.32	0.06	30.70	19.09	0.44
7	Jan 25, 1993	R	B	388.00	174.00	47.50	13.50	12.10	1.48	141.40	8.21	0.06	29.80	21.05	0.15
7	Jan 25, 1993	R	B	388.00	175.00	47.60	13.70	11.60	1.42	141.80	8.25	0.08	29.70	20.78	0.42
7	Mar 10, 1993	R	B	378.00	176.30	48.20	13.55	12.80	1.33	134.40	8.13	0.08	29.60	20.90	-
7	Jun 02, 1993	R	B	407.00	188.60	50.20	15.35	13.90	1.20	156.70	8.19	0.06	30.90	18.78	0.10
8	Dec 22, 1988	R	B	391.00	193.00	54.40	13.90	8.80	1.20	164.80	8.24	0.06	18.50	21.87	1.72
8	Nov 19, 1990	R	B	419.00	205.30	58.30	14.45	9.60	1.25	166.80	8.10	0.06	22.90	19.88	0.55
8	Jan 31, 1991	R	B	404.00	196.50	54.70	15.55	10.00	1.38	160.90	8.25	0.06	24.10	20.19	-
8	Jan 31, 1991	T	B	409.00	194.20	54.30	14.25	10.90	1.39	162.30	8.21	0.06	24.20	20.15	-
8	May 01, 1991	R	B	-	182.70	50.90	13.50	10.40	1.21	-	-	-	26.90	32.46	.12<T
8	Jun 18, 1991	R	B	422.00	177.40	46.90	14.65	10.70	1.32	152.50	8.30	0.06	26.00	18.73	0.51

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
7	Apr 07, 1983	5.6	-	-	-	-	0.700	-	-	-	-	-
7	Jul 12, 1983	.1<W	-	-	.3<T	.1<W	-	-	-	0.80	-	-
7	Dec 19, 1983	8.2	-	-	.1<T	.1<W	0.500	-	-	0.70	-	-
7	Sep 17, 1984	1.5	-	-	.2<T	.1<W	0.600	-	-	0.70	-	-
7	Sep 17, 1984	1.0	-	-	.10<W	.05<W	2.900	-	-	0.70	-	-
7	Dec 18, 1985	<.5<W	<.010<W	-	<.10<W	<.05<W	0.500	<.005<W	-	0.70	-	-
7	Apr 23, 1986	1.0<T	.020<T	-	<.05<W	<.05<W	0.350	<.005<W	-	.3<T	-	-
7	Oct 14, 1986	.5<T	<.02<W	-	.2<T	.05<T	0.450	<.005<W	-	.5<T	-	-
7	Dec 17, 1986	.5<T	<.01<W	-	<.05<W	<.05<W	.2<T	.005<T	-	-	-	-
7	May 17, 1988	.5<T	<.02<W	-	.10<T	.10<T	0.500	.005<T	-	0.60	-	-
7	Dec 22, 1988	<.5<W	.02<T	-	.10<T	.05<T	0.450	.005<T	-	0.50	-	-
7	Apr 02, 1990	.5<T	.02<T	-	<.05<W	<.05<W	0.350	<.005<W	-	.4<T	-	-
7	May 22, 1990	.5<T	<.02<W	-	.15<T	.10<T	0.450	<.005<W	-	0.70	-	-
7	Nov 19, 1990	<.5<W	<.02<W	-	.05<T	<.05<W	0.400	<.005<W	-	0.50	-	-
7	Jan 31, 1991	-	<.02<W	-	-	-	0.300	<.005<W	-	-	-	-
7	Jan 31, 1991	-	<.02<W	-	-	-	0.300	<.005<W	-	-	-	-
7	Jun 18, 1991	.5<T	<.02<W	-	.15<T	.05<T	0.500	.010<T	-	0.80	-	-
7	Oct 08, 1991	.5<T	.003<T	.0015<T	.010<T	<.002<W	0.445	<.0010<W	<.2<W	0.50	-	-
7	Mar 02, 1992	1.0<T	<.02<W	-	0.650	<.05<W	<.05<W	.005<T	-	0.90	-	-
7	May 27, 1992	.5<T	<.02<W	-	.15<T	.05<T	0.350	<.005<W	-	2.70	-	-
7	Jan 25, 1993	.5<T	<.02<W	-	<.05<W	<.05<W	.20<T	<.005<W	-	1.00	-	-
7	Jan 25, 1993	.5<T	<.02<W	-	<.05<W	<.05<W	0.250	<.005<W	-	0.50	-	-
7	Mar 10, 1993	.5<T	.02<T	-	.05<T	<.05<W	0.250	.005<T	-	0.60	-	-
7	Jun 02, 1993	<.5<W	<.02<W	-	.10<T	<.05<W	0.450	<.005<W	-	0.70	-	-
8	Dec 22, 1988	.5<T	.02<T	-	.15<T	.05<T	0.450	.005<T	-	0.50	-	-
8	Nov 19, 1990	<.5<W	<.02<W	-	.05<T	<.05<W	0.450	<.005<W	-	.4<T	-	-
8	Jan 31, 1991	-	<.02<W	-	-	-	0.400	<.005<W	-	-	-	-
8	Jan 31, 1991	-	<.02<W	-	-	-	0.400	<.005<W	-	-	-	-
8	May 01, 1991	<.5<W	<.02<W	-	<.05<W	-	-	-	-	.4<T	-	-
8	Jun 16, 1991	<.5<W	<.02<W	-	.10<T	<.05<W	0.450	.005<T	-	0.70	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
8	Mar 02, 1992	R	B	414.00	186.50	51.00	14.35	10.10	1.32	154.50	8.38	.04 < T	28.60	18.71	.15 < T
8	May 27, 1992	R	B	408.00	191.10	53.70	13.85	12.60	1.12	150.90	8.33	0.06	30.20	19.51	0.32
8	Mar 10, 1993	R	B	381.00	176.10	48.80	13.15	13.10	1.28	136.90	8.10	0.06	29.50	19.97	-
8	Jun 02, 1993	R	B	395.00	179.90	48.70	14.15	13.40	1.20	149.90	8.21	0.06	31.30	18.92	0.51
9	Nov 28, 1990	T	B	-	-	-	-	11.60	-	-	-	0.26	34.10	54.40	0.43
9	Dec 04, 1990	T	B	380.00	370.00	-	-	12.40	-	313.00	-	0.06	39.80	56.00	0.47
9	Sep 23, 1991	T	B	664.00	350.00	93.00	-	18.50	-	280.00	7.64	0.08	37.40	22.80	8.65
9	Jan 20, 1992	T	B	-	-	100.00	-	18.30	-	-	-	0.67	16.70	24.60	-
9	Mar 09, 1992	T	B	-	330.00	100.00	-	17.20	-	264.00	-	-	41.40	30.20	-
9	Jun 08, 1992	T	B	-	-	88.00	-	7.36	-	-	-	0.46	16.80	29.50	-
9	Jun 22, 1992	T	B	667.00	330.00	88.00	-	16.60	-	244.00	7.37	5.80	44.80	25.60	2.00
9	Jul 13, 1992	T	B	-	-	94.00	-	15.80	-	-	-	0.18	42.90	27.80	-
9	Aug 04, 1992	T	B	-	-	95.00	-	16.90	-	-	-	0.06	46.10	28.80	-
9	Aug 31, 1992	T	B	-	-	87.00	-	17.30	-	-	-	0.19	46.20	22.10	-
9	Sep 28, 1992	T	B	679.00	330.00	94.00	-	20.10	-	264.00	7.60	0.49	44.80	15.80	0.25
9	Oct 26, 1992	T	B	-	-	97.00	-	14.90	-	-	-	1.20	46.20	34.20	-
9	Nov 16, 1992	T	B	-	-	90.00	-	18.00	-	-	-	1.20	46.80	34.80	-
9	Dec 07, 1992	T	B	-	-	85.00	-	14.90	-	-	-	0.09	46.00	24.70	-
9	Jan 18, 1993	T	B	-	-	100.00	-	20.40	-	-	-	0.12	47.60	24.20	-
9	Mar 08, 1993	T	B	-	-	86.00	-	20.10	-	-	-	0.78	44.40	30.90	-
10	May 26, 1987	R	B	619.00	344.84	120.00	-	20.00	1.80	275.00	7.65	0.06	23.10	47.00	0.40
10	Jul 21, 1987	R	B	594.00	396.80	110.00	-	18.00	1.90	136.00	7.27	0.92	57.00	54.40	1.30
10	Sep 22, 1987	R	B	451.00	361.30	79.00	-	26.00	3.10	261.00	7.08	0.14	49.20	50.00	0.43
10	Dec 08, 1987	R	B	460.00	343.10	91.00	-	16.00	2.30	280.20	7.78	0.08	45.90	56.20	0.31
10	Jan 19, 1988	R	B	519.00	347.10	130.00	-	23.00	2.40	285.20	7.82	0.09	41.00	54.00	0.28
10	Mar 22, 1988	R	B	-	-	99.00	-	19.00	-	-	7.62	-	49.20	49.00	0.34
10	May 17, 1988	R	B	-	-	95.00	-	27.00	-	-	8.58	-	67.20	63.70	0.66
10	Jul 12, 1988	R	B	-	-	100.00	-	27.00	-	-	7.61	-	59.20	53.20	0.20
10	Sep 13, 1988	R	B	-	-	110.00	-	23.00	-	-	8.09	-	67.60	58.50	0.25
10	Dec 14, 1988	R	B	700.00	372.00	100.00	-	-	0.53	274.00	7.86	0.08	56.40	47.00	0.25

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
8	Mar 02, 1992	<.5<W	<.02<W	-	.05<T	<.05<W	0.300	<.005<W	-	0.80	-	-
8	May 27, 1992	<.5<W	<.02<W	-	.10<T	.10<T	0.350	<.005<W	-	1.60	-	-
8	Mar 10, 1993	<.5<W	<.02<W	-	.05<T	<.05<W	0.250	<.005<W	-	0.50	-	-
8	Jun 02, 1993	<.5<W	<.02<W	-	.10<T	<.05<W	0.400	<.005<W	-	0.70	-	-
9	Nov 28, 1990	-	-	-	-	0.050	0.200	0.020	-	-	-	-
9	Dec 04, 1990	2.5	-	-	-	-	-	-	-	-	-	-
9	Sep 23, 1991	10.0	-	-	0.370	0.120	0.020	0.010	-	4.87	-	-
9	Jan 20, 1992	-	-	-	-	0.010	0.020	0.010	-	-	-	-
9	Mar 09, 1992	-	-	-	-	0.160	0.020	0.010	-	-	-	-
9	Jun 08, 1992	-	-	-	-	0.020	3.770	0.010	-	-	-	-
9	Jun 22, 1992	2.5	-	-	0.240	0.010	0.020	0.010	-	2.64	-	-
9	Jul 13, 1992	-	-	-	-	0.140	0.020	0.010	-	-	-	-
9	Aug 04, 1992	-	-	-	-	0.010	0.020	0.010	-	-	-	-
9	Aug 31, 1992	-	-	-	-	0.010	0.020	0.040	-	-	-	-
9	Sep 28, 1992	2.5	-	-	0.450	0.010	0.020	0.010	-	2.80	-	-
9	Oct 26, 1992	-	-	-	-	0.010	0.020	0.010	-	-	-	-
9	Nov 16, 1992	-	-	-	-	0.010	0.020	0.010	-	-	-	-
9	Dec 07, 1992	-	-	-	-	0.010	0.020	0.010	-	-	-	-
9	Jan 18, 1993	-	-	-	-	0.010	0.050	0.010	-	-	-	-
9	Mar 08, 1993	-	-	-	-	0.010	0.020	0.010	-	-	-	-
10	May 26, 1987	2.5	<.02	-	<.05	<.01	1.580	0.020	-	1.29	-	-
10	Jul 21, 1987	2.5	<.02	-	0.420	<.01	0.570	<.02	-	2.49	-	-
10	Sep 22, 1987	<2.5	-	-	-	-	1.190	<.02	-	1.43	322	-
10	Dec 08, 1987	<2.5	<.02	-	0.110	<.01	1.140	<.02	-	1.50	407	-
10	Jan 19, 1988	<2.5	<.02	-	<.05	<.01	1.310	<.02	-	2.33	422	-
10	Mar 22, 1988	-	-	-	-	<.01	1.200	<.02	-	-	-	-
10	May 17, 1988	-	-	-	-	0.040	1.150	<.01	-	-	-	-
10	Jul 12, 1988	-	-	-	-	<.014	1.890	<.02	-	-	-	-
10	Sep 13, 1988	-	-	-	-	<.001	0.870	<.02	-	-	-	-
10	Dec 14, 1988	<2.5	-	-	-	<.001	1.600	<.02	-	0.28	454	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
10	Jan 17, 1989	R	B	-	-	91.00	-	-	-	-	7.53	-	54.90	52.60	0.30
10	Feb 06, 1990	R	B	-	-	89.00	-	14.24	-	-	-	0.10	81.20	47.80	0.54
10	Apr 17, 1990	R	B	-	-	-	-	22.00	-	-	-	0.10	79.90	44.90	0.52
10	Jun 12, 1990	R	B	-	-	-	-	24.00	-	-	-	0.07	54.90	46.80	2.50
10	Aug 28, 1990	R	B	-	-	82.00	-	28.00	-	-	-	0.08	60.00	48.60	0.42
10	Sep 24, 1990	R	B	-	-	94.00	-	28.30	-	-	-	0.07	66.40	54.50	1.20
10	Oct 30, 1990	R	B	-	-	-	-	25.60	-	-	-	0.09	72.30	51.30	0.50
10	Nov 26, 1990	R	B	-	-	-	-	24.10	-	-	-	0.10	72.10	59.30	0.65
10	Dec 04, 1990	R	B	694.00	350.00	-	-	23.40	-	274.00	-	0.11	78.80	57.10	0.50
10	Jan 29, 1991	R	B	-	-	-	-	24.60	-	-	-	0.09	70.60	57.40	-
10	Feb 19, 1991	R	B	-	-	98.00	-	26.10	-	-	-	0.11	70.80	70.70	0.48
10	Apr 02, 1991	R	B	-	-	100.00	-	-	-	-	-	0.12	73.20	50.50	1.40
10	Apr 15, 1991	R	B	-	-	110.00	-	25.30	-	-	-	0.08	67.30	44.70	0.98
10	May 06, 1991	R	B	-	-	110.00	-	26.00	-	-	-	0.08	64.40	47.80	0.80
10	Jun 03, 1991	R	B	-	-	110.00	-	35.50	-	-	-	0.08	68.70	44.60	0.83
10	Jul 15, 1991	R	B	-	-	110.00	-	29.20	-	-	-	0.08	70.60	34.40	0.67
10	Aug 19, 1991	R	B	-	-	110.00	-	24.20	-	-	-	1.20	71.10	35.00	0.84
10	Sep 30, 1991	R	B	-	-	100.00	-	29.80	-	-	-	0.06	63.20	55.90	0.72
10	Oct 21, 1991	R	B	-	-	110.00	-	25.70	-	-	-	0.09	64.80	36.20	0.50
10	Nov 18, 1991	R	B	-	-	98.00	-	24.90	-	-	-	0.06	63.40	32.70	0.54
10	Dec 09, 1991	R	B	-	-	100.00	-	25.40	-	-	-	0.07	62.50	34.90	0.57
10	Jan 20, 1992	R	B	-	-	120.00	-	30.40	-	-	-	0.07	63.90	40.00	0.52
10	Feb 17, 1992	R	B	-	-	88.00	-	23.30	-	-	-	0.10	66.90	50.80	0.66
10	Mar 09, 1992	R	B	-	-	110.00	-	22.20	-	-	-	0.09	61.90	49.60	0.50
10	Apr 27, 1992	R	B	-	-	98.00	-	27.80	-	-	-	0.07	62.80	47.60	0.69
10	May 04, 1992	R	B	-	-	110.00	-	26.80	-	-	-	0.06	62.90	48.70	0.60
10	Jun 08, 1992	R	B	-	-	99.00	-	23.90	-	-	-	-	65.20	48.50	0.64
10	Jul 13, 1992	R	B	-	-	110.00	-	26.10	-	-	-	0.07	67.80	43.60	0.50
10	Aug 03, 1992	R	B	-	-	110.00	-	26.80	-	-	-	0.08	65.80	41.40	0.47
10	Aug 30, 1992	R	B	-	-	98.00	-	28.00	-	-	-	0.07	67.50	40.30	0.54

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
10	Jan 17, 1989	-	-	-	-	<0.01	1.280	<.02	-	-	-	-
10	Feb 06, 1990	-	-	-	-	0.050	0.990	0.020	-	-	-	-
10	Apr 17, 1990	-	-	-	-	-	-	-	-	-	-	-
10	Jun 12, 1990	-	-	-	-	-	-	-	-	-	-	-
10	Aug 28, 1990	-	-	-	-	-	-	-	-	-	-	-
10	Sep 24, 1990	-	-	-	-	-	-	-	-	-	-	-
10	Oct 30, 1990	-	-	-	-	-	-	-	-	-	-	-
10	Nov 26, 1990	-	-	-	-	-	-	-	-	-	-	-
10	Dec 04, 1990	-	-	-	-	-	-	-	-	-	-	-
10	Jan 29, 1991	-	-	-	-	0.050	0.040	0.020	-	-	-	-
10	Feb 19, 1991	-	-	-	-	0.050	0.500	0.010	-	-	-	-
10	Apr 02, 1991	-	-	-	-	0.050	0.400	0.010	-	-	-	-
10	Apr 15, 1991	-	-	-	-	0.050	0.400	0.010	-	-	-	-
10	May 06, 1991	-	-	-	-	0.080	0.700	0.010	-	-	-	-
10	Jun 03, 1991	-	-	-	-	0.020	0.490	0.010	-	-	-	-
10	Jul 15, 1991	-	-	-	-	0.020	0.510	0.010	-	-	-	-
10	Aug 19, 1991	-	-	-	-	0.100	0.500	0.010	-	-	-	-
10	Sep 30, 1991	-	-	-	-	0.050	0.600	0.010	2.0	2.98	-	-
10	Oct 21, 1991	-	-	-	-	0.020	0.500	0.010	2.0	2.67	-	-
10	Nov 18, 1991	-	-	-	-	0.010	0.280	0.010	2.0	2.72	-	-
10	Dec 09, 1991	-	-	-	-	0.010	0.180	0.010	2.0	2.92	-	-
10	Jan 20, 1992	-	-	-	-	0.020	1.440	0.010	2.0	1.96	-	-
10	Feb 17, 1992	-	-	-	-	0.010	0.460	0.010	2.0	1.82	-	-
10	Mar 09, 1992	-	-	-	-	0.030	0.460	0.010	2.0	1.61	-	-
10	Apr 27, 1992	-	-	-	-	0.040	0.400	0.010	2.0	1.31	-	-
10	May 04, 1992	-	-	-	-	0.060	0.500	0.010	2.0	1.31	-	-
10	Jun 08, 1992	-	-	-	-	0.030	0.530	0.020	2.0	1.36	-	-
10	Jul 13, 1992	-	-	-	-	0.030	0.410	0.010	2.0	1.58	-	-
10	Aug 03, 1992	-	-	-	-	0.010	0.700	0.010	2.0	1.63	-	-
10	Aug 30, 1992	-	-	-	-	0.010	0.660	0.010	2.0	1.52	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
10	Oct 26, 1992	R	B	-	-	110.00	-	30.40	-	-	-	0.08	70.20	42.00	0.58
10	Nov 16, 1992	R	B	-	-	98.00	-	24.60	-	-	-	0.10	71.60	42.00	0.52
10	Dec 07, 1992	R	B	-	-	97.00	-	24.50	-	-	-	0.07	69.30	45.30	0.55
10	Jan 18, 1993	R	B	-	-	110.00	-	29.80	-	-	-	0.09	69.10	46.00	0.51
10	Feb 08, 1993	R	B	-	-	97.00	-	30.50	-	-	-	0.08	65.60	42.20	0.47
10	Mar 08, 1993	R	B	-	-	89.00	-	31.00	-	-	-	0.08	67.00	43.30	0.44
10	Apr 05, 1993	R	B	-	-	90.00	-	28.60	-	-	-	0.10	65.60	44.80	0.45
10	Nov 01, 1993	R	B	795.00	380.00	91.00	-	28.40	-	275.00	7.53	0.08	70.20	43.70	0.41
11	May 26, 1987	R	B	814.00	453.96	140.00	-	41.00	2.60	305.00	7.54	0.06	38.90	49.00	1.18
11	July 21, 1987	R	B	621.00	362.58	100.00	-	20.00	1.90	151.00	7.11	0.78	68.50	48.00	0.41
11	Sep 22, 1987	R	B	459.00	346.30	77.00	-	26.00	2.60	270.00	7.09	0.13	47.80	54.00	0.48
11	Dec 08, 1987	R	B	530.00	365.80	98.00	-	26.00	2.70	287.00	7.73	0.10	66.80	64.60	0.52
11	Jan 19, 1988	R	B	528.00	341.00	120.00	-	24.00	2.50	279.60	7.72	0.08	49.00	47.40	0.54
11	Mar 22, 1988	R	B	-	-	97.00	-	23.00	-	-	7.65	-	60.10	52.00	0.75
11	May 17, 1988	R	B	-	-	96.00	-	41.00	-	-	8.55	-	86.60	61.70	0.69
11	Jul 12, 1988	R	B	-	-	110.00	-	40.00	-	-	7.58	-	83.50	74.40	0.27
11	Sep 13, 1988	R	B	-	-	110.00	-	29.00	-	-	7.90	-	70.50	65.40	0.24
11	Dec 14, 1988	R	B	691.00	366.00	100.00	-	-	0.54	291.00	7.88	0.06	56.90	48.00	0.30
11	Jan 17, 1989	R	B	-	-	110.00	-	-	-	-	7.31	-	79.20	64.30	0.25
11	Feb 06, 1990	R	B	-	-	90.00	-	29.31	-	-	-	0.10	85.40	50.60	2.60
11	Apr 17, 1990	R	B	-	-	-	-	40.00	-	-	-	0.10	105.00	50.70	2.50
11	Jun 12, 1990	R	B	-	-	-	-	34.00	-	-	-	0.06	65.00	47.00	2.20
11	Aug 28, 1990	R	B	-	-	86.00	-	37.00	-	-	-	0.07	73.40	44.30	1.50
11	Sep 24, 1990	R	B	-	-	66.00	-	36.10	-	-	-	0.07	70.90	50.50	2.00
11	Oct 30, 1990	R	B	-	-	-	-	32.30	-	-	-	0.07	79.80	53.20	1.40
11	Nov 26, 1990	R	B	-	-	-	-	31.10	-	-	-	0.08	76.10	46.20	2.50
11	Dec 04, 1990	R	B	271.00	340.00	-	-	29.50	-	271.00	-	0.08	83.00	49.80	2.50
11	Jan 29, 1991	R	B	-	-	-	-	35.10	-	-	-	0.08	82.70	61.50	-
11	Feb 19, 1991	R	B	-	-	100.00	-	33.30	-	-	-	0.08	76.70	57.10	1.70
11	Apr 02, 1991	R	B	-	-	110.00	-	-	-	-	-	0.09	77.30	53.90	1.60

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
10	Oct 26, 1992	-	-	-	-	0.010	0.420	0.010	2.0	1.67	-	-
10	Nov 16, 1992	-	-	-	-	0.010	0.460	0.010	2.0	1.62	-	-
10	Dec 07, 1992	-	-	-	-	0.010	0.420	0.010	2.0	0.43	-	-
10	Jan 18, 1993	-	-	-	-	0.010	0.550	0.010	2.0	0.48	-	-
10	Feb 08, 1993	-	-	-	-	0.010	0.570	0.010	2.0	1.38	-	-
10	Mar 08, 1993	-	-	-	-	0.010	0.410	0.010	2.0	0.83	-	-
10	Apr 05, 1993	-	-	-	-	0.020	0.590	0.010	2.0	1.47	-	-
10	Nov 01, 1993	2.5	-	-	0.080	0.010	0.450	0.010	2.0	2.27	-	-
11	May 26, 1987	4.0	<.02	-	<.05	<.01	0.270	0.020	-	1.93	-	-
11	July 21, 1987	2.5	0.780	-	0.390	<.01	1.550	<.02	-	2.29	-	-
11	Sep 22, 1987	<2.5	-	-	-	-	1.270	0.030	-	1.25	349	-
11	Dec 08, 1987	<2.5	<.02	-	0.010	<.01	0.740	0.020	-	1.65	463	-
11	Jan 19, 1988	<2.5	<.02	-	<.05	<.01	1.340	0.020	-	2.11	440	-
11	Mar 22, 1988	-	-	-	-	<.01	1.090	<.02	-	-	-	-
11	May 17, 1988	-	-	-	-	<.03	0.680	0.030	-	-	-	-
11	Jul 12, 1988	-	-	-	-	<0.14	1.350	0.020	-	-	-	-
11	Sep 13, 1988	-	-	-	-	<.01	0.990	<.02	-	-	-	-
11	Dec 14, 1988	<2.5	-	-	-	<.01	2.470	0.060	-	1.43	482	-
11	Jan 17, 1989	-	-	-	-	<0.01	1.400	<.02	-	-	-	-
11	Feb 06, 1990	-	-	-	-	0.050	0.200	0.020	-	-	-	-
11	Apr 17, 1990	-	-	-	-	-	0.520	0.020	-	-	-	-
11	Jun 12, 1990	-	-	-	-	-	0.670	0.020	-	-	-	-
11	Aug 28, 1990	-	-	-	-	-0.050	0.300	0.100	-	-	-	-
11	Sep 24, 1990	-	-	-	-	0.050	0.200	0.100	-	-	-	-
11	Oct 30, 1990	-	-	-	-	0.050	0.200	0.020	-	-	-	-
11	Nov 26, 1990	-	-	-	-	0.050	0.200	0.020	-	-	-	-
11	Dec 04, 1990	2.5	-	-	-	0.050	0.200	0.020	-	-	-	-
11	Jan 29, 1991	-	-	-	-	0.500	0.200	0.020	-	-	-	-
11	Feb 19, 1991	-	-	-	-	0.050	0.100	0.020	-	-	-	-
11	Apr 02, 1991	-	-	-	-	0.050	0.200	0.010	-	-	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
11	Apr 15, 1991	R	B	-	-	110.00	-	33.50	-	-	-	0.07	76.40	43.50	1.50
11	May 06, 1991	R	B	-	-	110.00	-	31.30	-	-	-	0.07	68.90	42.30	1.60
11	Jun 03, 1991	R	B	-	-	110.00	-	34.20	-	-	-	0.07	76.20	32.10	1.90
11	Jul 15, 1991	R	B	-	-	100.00	-	33.70	-	-	-	0.06	74.60	28.60	1.80
11	Aug 19, 1991	R	B	-	-	110.00	-	29.40	-	-	-	0.07	75.40	36.80	1.60
11	Sep 30, 1991	R	B	-	-	98.00	-	36.50	-	-	-	0.06	72.70	45.30	2.00
11	Oct 21, 1991	R	B	-	-	110.00	-	34.20	-	-	-	0.08	82.20	30.00	3.60
11	Nov 18, 1991	R	B	-	-	94.00	-	32.00	-	-	-	0.06	74.50	28.60	2.30
11	Dec 09, 1991	R	B	-	-	100.00	-	33.40	-	-	-	0.06	81.20	35.80	2.90
11	Jan 20, 1992	R	B	-	-	110.00	-	41.00	-	-	-	0.08	75.10	37.60	1.70
11	Feb 17, 1992	R	B	-	-	100.00	-	32.20	-	-	-	0.08	78.40	39.20	2.00
11	Mar 09, 1992	R	B	-	-	110.00	-	35.10	-	-	-	0.09	79.80	36.40	2.50
11	Apr 27, 1992	R	B	-	-	100.00	-	41.20	-	-	-	0.07	81.50	44.70	2.60
11	May 04, 1992	R	B	-	-	120.00	-	32.30	-	-	-	0.06	78.60	44.90	1.90
11	Jun 08, 1992	R	B	-	-	110.00	-	34.00	-	-	-	0.06	81.90	60.80	0.29
11	Jul 13, 1992	R	B	-	-	98.00	-	37.30	-	-	-	0.07	79.30	34.60	3.90
11	Aug 03, 1992	R	B	-	-	110.00	-	35.40	-	-	-	0.07	80.40	34.70	5.50
11	Aug 30, 1992	R	B	-	-	110.00	-	38.30	-	-	-	0.06	84.70	55.40	0.26
11	Oct 26, 1992	R	B	-	-	120.00	-	42.00	-	-	-	0.07	87.60	50.80	0.32
11	Nov 16, 1992	R	B	-	-	96.00	-	35.30	-	-	-	0.08	87.20	32.60	2.60
11	Dec 07, 1992	R	B	-	-	94.00	-	33.70	-	-	-	0.06	84.80	57.00	0.27
11	Jan 18, 1993	R	B	-	-	110.00	-	39.80	-	-	-	0.08	81.60	39.90	2.40
11	Feb 08, 1993	R	B	-	-	97.00	-	48.50	-	-	-	0.07	79.30	39.80	2.70
11	Mar 08, 1993	R	B	-	-	93.00	-	41.00	-	-	-	0.06	83.30	39.20	3.60
12	May 26, 1987	R	B	634.00	343.38	120.00	-	26.00	2.00	270.00	7.67	0.06	19.90	48.00	0.63
12	Jul 21, 1987	R	B	654.00	419.12	110.00	-	22.00	2.40	144.00	7.08	0.76	77.00	72.00	0.45
12	Sep 22, 1987	R	B	520.00	371.10	92.00	-	33.00	0.54	276.00	7.02	0.13	71.00	61.00	0.35
12	Dec 08, 1987	R	B	560.00	381.80	100.00	-	38.00	3.00	296.40	7.83	0.07	88.20	60.80	1.40
12	Jan 19, 1988	R	B	600.00	400.40	130.00	-	32.00	2.90	311.40	7.75	0.08	49.50	65.00	0.24
12	Mar 22, 1988	R	B	-	-	98.00	-	23.00	-	-	7.64	-	61.70	53.20	0.44

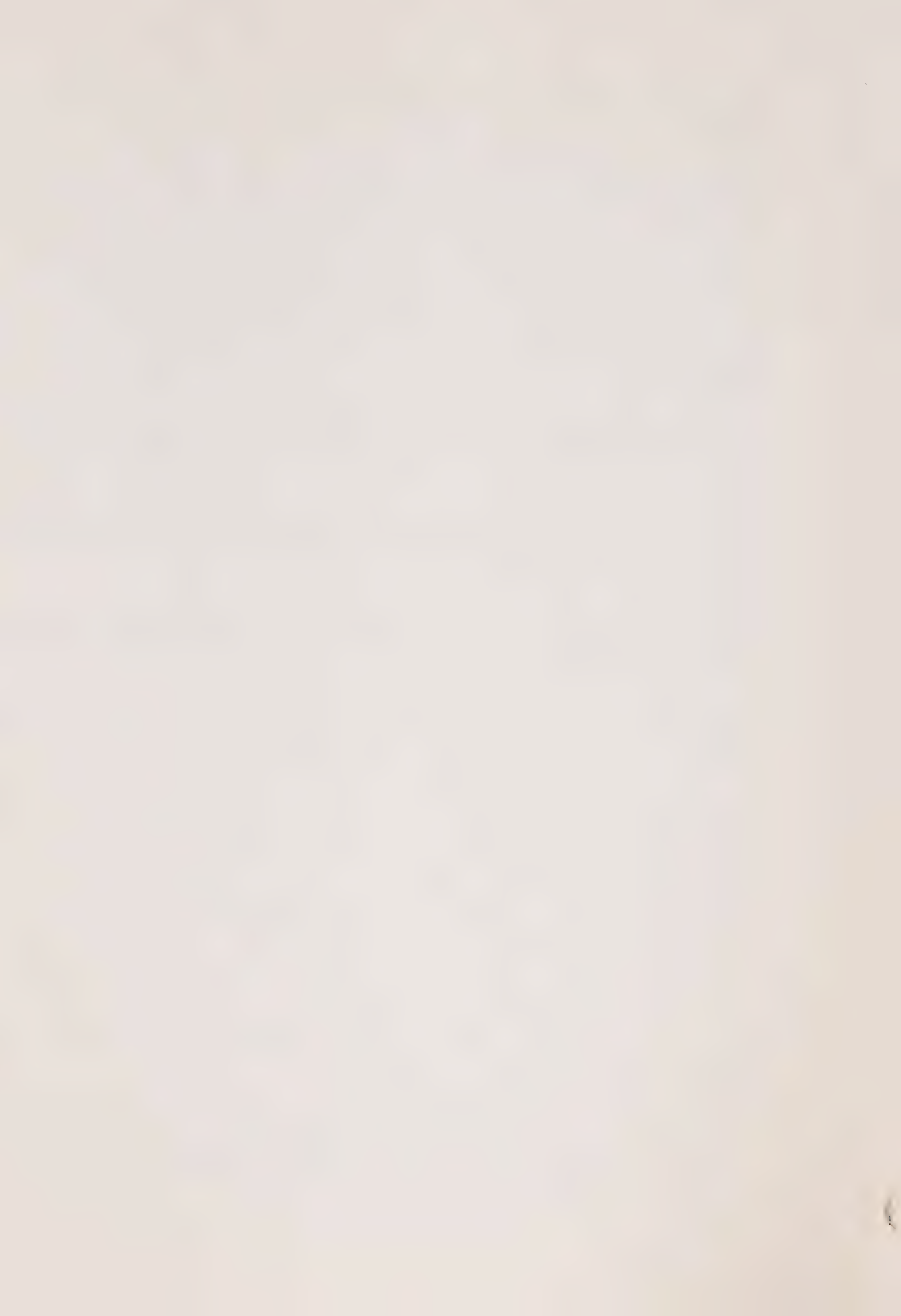
SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
11	Apr 15, 1991	-	-	-	-	0.050	0.200	0.020	-	-	-	-
11	May 06, 1991	-	-	-	-	0.050	0.100	0.010	-	-	-	-
11	Jun 03, 1991	-	-	-	-	0.010	0.070	0.010	-	-	-	-
11	Jul 15, 1991	-	-	-	-	0.010	0.100	0.010	-	-	-	-
11	Aug 19, 1991	-	-	-	-	0.010	0.060	0.020	-	-	-	-
11	Sep 30, 1991	-	-	-	-	0.020	0.170	0.020	2.0	2.23	-	-
11	Oct 21, 1991	-	-	-	-	0.010	0.020	0.010	2.0	2.91	-	-
11	Nov 18, 1991	-	-	-	-	0.010	0.020	0.010	2.0	2.93	-	-
11	Dec 09, 1991	-	-	-	-	0.010	0.020	0.010	2.0	3.34	-	-
11	Jan 20, 1992	-	-	-	-	0.020	0.130	0.010	2.0	2.00	-	-
11	Feb 17, 1992	-	-	-	-	0.010	0.110	0.010	2.0	1.91	-	-
11	Mar 09, 1992	-	-	-	-	0.010	0.020	0.010	2.0	1.67	-	-
11	Apr 27, 1992	-	-	-	-	0.030	0.060	0.010	2.0	1.47	-	-
11	May 04, 1992	-	-	-	-	0.040	0.340	0.030	2.0	1.69	-	-
11	Jun 08, 1992	-	-	-	-	0.020	0.430	0.040	2.0	1.73	-	-
11	Jul 13, 1992	-	-	-	-	0.010	0.020	0.010	2.0	1.90	-	-
11	Aug 03, 1992	-	-	-	-	0.010	0.020	0.010	2.0	1.90	-	-
11	Aug 30, 1992	-	-	-	-	0.010	0.500	0.030	2.0	1.63	-	-
11	Oct 26, 1992	-	-	-	-	0.010	0.330	0.020	2.0	1.96	-	-
11	Nov 16, 1992	-	-	-	-	0.010	0.040	0.010	2.0	2.05	-	-
11	Dec 07, 1992	-	-	-	-	0.010	0.370	0.030	2.0	0.56	-	-
11	Jan 18, 1993	-	-	-	-	0.010	0.200	0.010	2.0	0.69	-	-
11	Feb 08, 1993	-	-	-	-	0.010	0.050	0.010	2.0	1.94	-	-
11	Mar 08, 1993	-	-	-	-	0.010	0.060	0.010	2.0	1.10	-	-
12	May 26, 1987	2.0	< 0.2	-	< .05	0.030	1.370	0.040	-	1.61	-	-
12	Jul 21, 1987	2.5	< 0.2	-	0.330	< .01	1.390	< .02	-	3.05	-	-
12	Sep 22, 1987	< 2.5	-	-	-	-	1.310	0.030	-	1.49	486	-
12	Dec 08, 1987	< 2.5	< 0.2	-	0.110	< .01	0.330	< .02	-	1.66	525	-
12	Jan 19, 1988	< 2.5	< 0.2	-	< .05	< .01	0.850	0.030	-	2.19	486	-
12	Mar 22, 1988	-	-	-	-	< .01	1.100	< .02	-	-	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB (FTU)
12	May 22, 1988	R	B	-	-	100.00	-	42.00	-	-	8.55	-	81.40	63.50	0.96
12	Jul 12, 1988	R	B	-	-	110.00	-	40.00	-	-	7.66	-	84.90	77.00	0.15
12	Sep 13, 1988	R	B	-	-	110.00	-	30.00	-	-	7.83	-	72.20	68.90	0.20
12	Dec 14, 1988	R	B	764.00	370.00	110.00	-	-	0.54	284.00	7.83	0.06	61.70	56.00	0.37
12	Jan 17, 1989	R	B	-	-	100.00	-	-	-	-	7.37	-	66.90	63.80	0.28
12	Feb 06, 1990	R	B	-	-	91.00	-	35.52	-	-	-	0.10	81.80	50.40	0.69
12	Apr 17, 1990	R	B	-	-	-	-	30.00	-	-	-	0.10	94.50	47.70	0.92
12	Jun 12, 1990	R	B	-	-	-	-	33.00	-	-	-	0.06	64.40	46.80	3.00
12	Aug 28, 1990	R	B	-	-	92.00	-	25.00	-	-	-	0.07	53.30	54.50	0.86
12	Sep 24, 1990	R	B	-	-	72.00	-	29.80	-	-	-	0.07	57.40	58.50	2.20
12	Oct 30, 1990	R	B	-	-	-	-	26.40	-	-	-	0.07	63.30	55.60	0.82
12	Nov 26, 1990	R	B	-	-	-	-	26.10	-	-	-	0.07	73.30	56.20	0.83
12	Dec 04, 1990	R	B	622.00	360.00	-	-	25.00	-	282.00	-	0.07	135.00	53.00	0.78
12	Jan 29, 1991	R	B	-	-	-	-	26.00	-	-	-	0.08	65.40	63.20	-
12	Feb 19, 1991	R	B	-	-	98.00	-	27.00	-	-	-	0.08	65.60	58.30	0.94
12	Apr 02, 1991	R	B	-	-	110.00	-	-	-	-	-	0.08	63.90	60.80	0.91
12	Apr 15, 1991	R	B	-	-	110.00	-	26.70	-	-	-	0.07	64.10	48.70	0.93
12	May 06, 1991	R	B	-	-	110.00	-	19.50	-	-	-	0.07	61.10	53.80	0.71
12	Jun 03, 1991	R	B	-	-	110.00	-	27.00	-	-	-	0.05	60.80	42.60	1.00
12	Jul 15, 1991	R	B	-	-	100.00	-	26.60	-	-	-	0.06	59.20	28.70	1.30
12	Aug 19, 1991	R	B	-	-	110.00	-	22.60	-	-	-	0.06	57.70	45.10	1.00
12	Sep 30, 1991	R	B	-	-	99.00	-	24.20	-	-	-	0.06	52.00	63.30	0.74
12	Oct 21, 1991	R	B	-	-	90.00	-	23.60	-	-	-	0.07	61.40	43.30	0.65
12	Nov 18, 1991	R	B	-	-	91.00	-	23.90	-	-	-	0.06	62.00	38.90	0.85
12	Dec 09, 1991	R	B	-	-	91.00	-	25.20	-	-	-	0.06	62.20	39.80	1.60
12	Jan 20, 1992	R	B	-	-	110.00	-	28.00	-	-	-	0.07	58.40	46.80	0.73
12	Feb 17, 1992	R	B	-	-	110.00	-	19.50	-	-	-	0.07	62.20	56.40	0.63
12	Mar 09, 1992	R	B	-	-	110.00	-	23.10	-	-	-	0.06	60.10	53.30	0.56
12	Apr 27, 1992	R	B	-	-	100.00	-	24.50	-	-	-	0.06	64.80	61.10	0.79
12	May 04, 1992	R	B	-	-	110.00	-	22.30	-	-	-	0.05	62.50	60.80	0.49

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
12	May 22, 1988	-	-	-	-	0.040	0.610	0.030	-	-	-	-
12	Jul 12, 1988	-	-	-	-	0.150	1.510	<.02	-	-	-	-
12	Sep 13, 1988	-	-	-	-	<0.01	0.960	<.02	-	-	-	-
12	Dec 14, 1988	-	-	-	-	<0.01	2.270	0.030	-	0.96	496	-
12	Jan 17, 1989	-	-	-	-	<0.01	1.740	<.02	-	-	-	-
12	Feb 06, 1990	-	-	-	-	0.050	1.130	0.020	-	-	-	-
12	Apr 17, 1990	-	-	-	-	-	1.020	0.020	-	-	-	-
12	Jun 12, 1990	-	-	-	-	-	0.680	0.020	-	-	-	-
12	Aug 28, 1990	-	-	-	-	0.050	0.600	0.100	-	-	-	-
12	Sep 24, 1990	-	-	-	-	0.050	0.900	0.100	-	-	-	-
12	Oct 30, 1990	-	-	-	-	0.050	0.800	0.020	-	-	-	-
12	Nov 26, 1990	-	-	-	-	0.050	0.800	0.020	-	-	-	-
12	Dec 04, 1990	2.5	-	-	-	0.050	0.800	0.020	-	-	-	-
12	Jan 29, 1991	-	-	-	-	0.050	0.060	0.060	-	-	-	-
12	Feb 19, 1991	-	-	-	-	0.050	0.600	0.030	-	-	-	-
12	Apr 02, 1991	-	-	-	-	0.050	0.700	0.040	-	-	-	-
12	Apr 15, 1991	-	-	-	-	0.050	0.700	0.040	-	-	-	-
12	May 06, 1991	-	-	-	-	0.060	0.900	0.030	-	-	-	-
12	Jun 03, 1991	-	-	-	-	0.040	0.800	0.040	-	-	-	-
12	Jul 15, 1991	-	-	-	-	0.050	0.730	0.030	-	-	-	-
12	Aug 19, 1991	-	-	-	-	0.020	0.840	0.050	-	-	-	-
12	Sep 30, 1991	-	-	-	-	0.050	0.980	0.080	2.0	-	-	-
12	Oct 21, 1991	-	-	-	-	0.010	0.670	0.050	2.0	-	-	-
12	Nov 18, 1991	-	-	-	-	0.020	0.330	0.030	2.0	-	-	-
12	Dec 09, 1991	-	-	-	-	0.010	0.220	0.010	2.0	-	-	-
12	Jan 20, 1992	-	-	-	-	0.050	0.780	0.050	2.0	-	-	-
12	Feb 17, 1992	-	-	-	-	0.020	0.670	0.070	2.0	-	-	-
12	Mar 09, 1992	-	-	-	-	0.040	0.620	0.070	2.0	-	-	-
12	Apr 27, 1992	-	-	-	-	0.050	0.540	0.060	2.0	-	-	-
12	May 04, 1992	-	-	-	-	0.060	1.340	0.070	2.0	-	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
12	Jun 08, 1992	R	B	-	-	99.00	-	24.60	-	-	-	0.06	65.20	52.90	0.85
12	Jul 07, 1992	R	B	-	-	-	-	-	-	-	7.42	-	67.60	50.10	-
12	Jul 13, 1992	R	B	-	-	110.00	-	27.60	-	-	-	0.06	69.90	61.80	0.64
12	Aug 03, 1992	R	B	-	-	110.00	-	29.10	-	-	-	0.07	70.80	48.00	0.58
12	Aug 30, 1992	R	B	-	-	98.00	-	29.80	-	-	-	0.06	68.20	43.60	0.58
12	Oct 26, 1992	R	B	-	-	110.00	-	31.80	-	-	-	0.07	65.30	42.80	0.58
12	Nov 16, 1992	R	B	-	-	93.00	-	27.70	-	-	-	0.08	63.40	40.40	0.54
12	Dec 07, 1992	R	B	-	-	110.00	-	26.30	-	-	-	0.06	65.00	44.60	0.57
12	Jan 18, 1993	R	B	-	-	110.00	-	29.30	-	-	-	0.08	64.30	46.80	0.54
12	Feb 08, 1993	R	B	-	-	97.00	-	29.90	-	-	-	0.06	60.70	50.90	0.42
12	Mar 08, 1993	R	B	-	-	94.00	-	26.00	-	-	-	0.06	60.20	50.80	0.55
12	Apr 05, 1993	R	B	-	-	89.00	-	26.80	-	-	-	0.08	62.00	46.80	0.54
12	Nov 01, 1993	R	B	837.00	390.00	98.00	-	26.70	-	290.00	7.49	0.07	66.90	45.60	0.55
13	May 26, 1987	R	B	732.00	388.49	140.00	-	31.00	2.30	315.00	7.50	0.73	29.10	68.00	0.22
13	Jul 21, 1987	R	B	668.00	403.25	85.00	-	22.00	2.40	161.00	7.09	0.73	84.00	53.60	0.45
13	Sep 22, 1987	R	B	530.00	388.40	86.00	-	22.00	1.40	268.00	7.05	0.13	71.00	61.00	0.35
13	Dec 08, 1987	R	B	520.00	392.80	110.00	-	29.00	2.60	297.40	7.73	0.07	80.00	68.80	0.28
13	Jan 19, 1988	R	B	562.00	387.10	130.00	-	28.00	2.80	302.00	7.79	0.09	55.00	63.40	0.13
13	Jul 12, 1988	R	B	-	-	110.00	-	40.00	-	-	7.62	-	85.50	72.60	0.40
13	Sep 13, 1988	R	B	-	-	110.00	-	24.00	-	-	8.12	-	61.10	59.10	0.25
13	Dec 14, 1988	R	B	841.00	399.00	120.00	-	-	0.60	297.00	7.82	0.06	75.30	49.00	0.30
13	Jan 17, 1989	R	B	-	-	160.00	-	-	-	-	7.37	-	67.20	60.70	0.30
13	Jan 29, 1991	R	B	-	-	-	-	34.20	-	-	-	0.07	82.20	65.40	-
13	Feb 19, 1991	R	B	-	-	110.00	-	39.10	-	-	-	0.07	90.30	84.60	0.25
13	Apr 02, 1991	R	B	-	-	120.00	-	-	-	-	-	0.08	87.70	59.60	0.38
13	Apr 15, 1991	R	B	-	-	120.00	-	-	-	-	-	0.07	87.20	61.10	0.30
13	Apr 29, 1991	R	B	811.00	330.00	110.00	-	37.90	-	263.00	-	0.08	84.80	38.70	3.10
13	May 06, 1991	R	B	-	-	120.00	-	28.50	-	-	-	0.07	79.70	58.60	0.22
14	Dec 11, 1989	R	B	992.00	372.00	107.00	25.50	37.50	2.50	307.00	7.80	<0.10	80.50	53.00	0.80
14	Feb 06, 1990	R	B	-	-	86.00	-	28.87	-	-	-	0.10	80.30	49.70	3.00

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
12	Jun 08, 1992	-	-	-	-	0.050	0.600	0.050	2.0	-	-	-
12	Jul 07, 1992	-	-	-	-	-	-	-	-	-	-	-
12	Jul 13, 1992	-	-	-	-	0.040	0.550	0.030	2.0	-	-	-
12	Aug 03, 1992	-	-	-	-	0.010	0.670	0.020	2.0	-	-	-
12	Aug 30, 1992	-	-	-	-	0.040	0.640	0.020	2.0	-	-	-
12	Oct 26, 1992	-	-	-	-	0.010	0.510	0.010	2.0	-	-	-
12	Nov 16, 1992	-	-	-	-	0.010	0.640	0.030	2.0	-	-	-
12	Dec 07, 1992	-	-	-	-	0.020	0.590	0.020	2.0	-	-	-
12	Jan 18, 1993	-	-	-	-	0.010	0.710	0.010	2.0	-	-	-
12	Feb 08, 1993	-	-	-	-	0.010	0.880	0.010	2.0	-	-	-
12	Mar 08, 1993	-	-	-	-	0.030	0.620	0.030	2.0	-	-	-
12	Apr 05, 1993	-	-	-	-	0.040	0.740	0.040	2.0	-	-	-
12	Nov 01, 1993	2.5	-	-	0.110	0.010	0.610	0.010	2.0	-	-	-
13	May 26, 1987	4.0	<0.2	-	<.05	<.01	0.950	0.040	-	2.52	-	-
13	Jul 21, 1987	2.5	<0.2	-	0.390	<.01	1.500	<.02	-	2.69	-	-
13	Sep 22, 1987	<2.5	-	-	-	-	1.000	0.020	-	0.82	457	-
13	Dec 08, 1987	<2.5	<0.2	-	0.020	<.01	0.850	0.040	-	1.64	466	-
13	Jan 19, 1988	<2.5	<0.2	-	<.05	<.01	0.950	0.020	-	1.18	447	-
13	Jul 12, 1988	-	-	-	-	0.350	1.470	<.02	-	-	-	-
13	Sep 13, 1988	-	-	-	-	<.01	1.740	0.020	-	-	-	-
13	Dec 14, 1988	<2.5	-	-	-	<.01	1.410	0.040	-	0.76	-	-
13	Jan 17, 1989	-	-	-	-	<.01	1.670	<.02	-	-	-	-
13	Jan 29, 1991	-	-	-	-	0.050	0.020	0.020	-	-	-	-
13	Feb 19, 1991	-	-	-	-	0.050	0.500	0.030	-	-	-	-
13	Apr 02, 1991	-	-	-	-	0.050	0.500	0.020	-	-	-	-
13	Apr 15, 1991	-	-	-	-	0.050	0.400	0.020	-	-	-	-
13	Apr 29, 1991	2.0	-	-	0.260	0.050	0.100	0.010	-	-	-	-
13	May 06, 1991	-	-	-	-	0.050	0.700	0.030	-	-	-	-
14	Dec 11, 1989	-	-	-	0.800	0.090	0.350	0.560	9.0	<1.0	-	-
14	Feb 06, 1990	-	-	-	-	0.050	0.600	0.020	-	-	-	-



SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
14	Apr 17, 1990	R	B	-	-	-	-	33.00	-	-	-	0.10	87.50	63.00	0.24
14	Jun 12, 1990	R	B	-	-	-	-	31.00	-	-	-	0.06	65.30	47.10	3.10
14	Jun 18, 1990	R	B	793.00	370.00	93.00	-	-	-	281.00	-	0.07	70.00	49.10	1.50
14	Aug 28, 1990	R	B	-	-	86.00	-	36.00	-	-	-	0.07	73.30	43.80	1.50
14	Sep 24, 1990	R	B	-	-	83.00	-	36.40	-	-	-	0.07	71.20	51.50	2.30
14	Oct 30, 1990	R	B	-	-	-	-	35.90	-	-	-	0.05	88.00	-	0.27
14	Nov 20, 1990	R	B	868.00	380.00	-	-	34.00	-	288.00	-	0.09	88.90	66.20	0.32
14	Dec 10, 1990	R	B	755.00	360.00	-	-	29.80	-	278.00	-	0.10	74.50	53.80	3.00
14	Jun 03, 1991	R	B	-	-	120.00	-	37.80	-	-	-	0.07	86.40	44.70	0.30
14	Jul 09, 1991	R	B	868.00	370.00	100.00	-	27.20	-	276.00	7.54	0.09	69.10	33.80	1.70
14	Jul 15, 1991	R	B	-	-	100.00	-	34.60	-	-	-	0.06	76.40	23.60	1.90
14	Aug 19, 1991	R	B	-	-	120.00	-	30.90	-	-	-	0.06	82.00	44.90	0.44
14	Sep 23, 1991	R	B	982.00	390.00	110.00	-	33.90	-	275.00	7.59	0.10	78.80	45.40	0.47
14	Sep 30, 1991	R	B	-	-	100.00	-	36.30	-	-	-	0.06	71.60	49.30	2.20
14	Oct 21, 1991	R	B	-	-	120.00	-	33.70	-	-	-	0.07	84.80	30.10	2.50
14	Nov 18, 1991	R	B	-	-	100.00	-	34.20	-	-	-	0.06	86.80	46.00	0.42
14	Dec 09, 1991	R	B	-	-	95.00	-	36.70	-	-	-	0.06	81.00	32.20	3.10
14	Jan 20, 1992	R	B	-	-	110.00	-	41.40	-	-	-	0.07	90.90	48.80	0.37
14	Feb 17, 1992	R	B	-	-	110.00	-	36.40	-	-	-	0.07	93.50	61.10	0.29
14	Mar 09, 1992	R	B	-	-	100.00	-	33.20	-	-	-	0.07	79.80	39.30	2.40
14	Mar 16, 1992	R	B	836.00	400.00	100.00	-	37.20	-	284.00	7.40	0.10	89.30	62.60	0.34
14	Apr 27, 1992	R	B	-	-	98.00	-	38.10	-	-	-	0.07	81.00	43.50	4.20
14	May 04, 1992	R	B	-	-	120.00	-	34.10	-	-	-	0.06	79.80	62.00	0.31
14	Jun 08, 1992	R	B	-	-	110.00	-	33.80	-	-	-	0.06	82.70	62.90	0.32
14	Jul 02, 1992	R	B	870.00	380.00	120.00	-	36.30	-	273.00	7.38	0.08	82.80	50.50	0.26
14	Jul 13, 1992	R	B	-	-	110.00	-	35.90	-	-	-	0.06	84.60	48.90	0.26
14	Aug 03, 1992	R	B	-	-	120.00	-	38.40	-	-	-	0.07	84.00	52.80	0.32
14	Aug 30, 1992	R	B	-	-	110.00	-	38.80	-	-	-	0.06	81.50	53.30	0.28
14	Sep 28, 1992	R	B	888.00	410.00	120.00	-	40.70	-	294.00	7.57	0.10	78.60	38.00	0.58
14	Oct 26, 1992	R	B	-	-	130.00	-	40.50	-	-	-	0.07	86.70	47.20	0.42



SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
14	Apr 17, 1990	-	-	-	-	-	-	-	-	-	-	-
14	Jun 12, 1990	-	-	-	-	-	-	-	-	-	-	-
14	Jun 18, 1990	2.5	-	-	-	-	-	-	-	-	-	-
14	Aug 28, 1990	-	-	-	-	-	-	-	-	-	-	-
14	Sep 24, 1990	-	-	-	-	-	-	-	-	-	-	-
14	Oct 30, 1990	-	-	-	-	-	-	-	-	-	-	-
14	Nov 20, 1990	2.5	-	-	-	-	-	-	-	-	-	-
14	Dec 10, 1990	2.5	-	-	-	-	-	-	-	-	-	-
14	Jun 03, 1991	-	-	-	-	0.010	0.540	0.020	-	-	-	-
14	Jul 09, 1991	2.5	-	-	0.130	0.010	0.490	0.010	-	-	-	-
14	Jul 15, 1991	-	-	-	-	0.010	0.110	0.010	-	-	-	-
14	Aug 19, 1991	-	-	-	-	0.010	0.600	0.010	-	-	-	-
14	Sep 23, 1991	2.5	-	-	0.230	0.010	0.610	0.020	-	-	-	-
14	Sep 30, 1991	-	-	-	-	0.030	0.160	0.020	2.0	-	-	-
14	Oct 21, 1991	-	-	-	-	0.010	0.020	0.010	2.0	-	-	-
14	Nov 18, 1991	-	-	-	-	0.010	0.200	0.030	2.0	-	-	-
14	Dec 09, 1991	-	-	-	-	0.010	0.020	0.010	2.0	-	-	-
14	Jan 20, 1992	-	-	-	-	0.080	0.580	0.030	2.0	-	-	-
14	Feb 17, 1992	-	-	-	-	0.010	0.410	0.030	2.0	-	-	-
14	Mar 09, 1992	-	-	-	-	0.010	0.020	0.010	2.0	-	-	-
14	Mar 16, 1992	2.5	-	-	0.370	0.030	0.480	0.030	-	-	-	-
14	Apr 27, 1992	-	-	-	-	0.020	0.040	0.010	2.0	-	-	-
14	May 04, 1992	-	-	-	-	0.040	0.530	0.040	2.0	-	-	-
14	Jun 08, 1992	-	-	-	-	0.020	0.380	0.040	2.0	-	-	-
14	Jul 02, 1992	2.5	-	-	0.220	0.010	0.140	0.030	-	-	-	-
14	Jul 13, 1992	-	-	-	-	0.010	0.290	0.030	2.0	-	-	-
14	Aug 03, 1992	-	-	-	-	0.010	0.440	0.020	2.0	-	-	-
14	Aug 30, 1992	-	-	-	-	0.010	0.490	0.030	2.0	-	-	-
14	Sep 28, 1992	2.5	-	-	0.500	0.010	0.510	0.020	-	-	-	-
14	Oct 26, 1992	-	-	-	-	0.010	0.340	0.020	2.0	-	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
14	Nov 16, 1992	R	B	-	-	110.00	-	36.60	-	-	-	0.07	87.20	49.20	0.41
14	Dec 07, 1992	R	B	-	-	89.00	-	35.40	-	-	-	0.06	85.60	56.70	0.30
14	Jan 18, 1993	R	B	-	-	120.00	-	38.70	-	-	-	0.07	82.40	56.00	0.27
14	Feb 08, 1993	R	B	-	-	110.00	-	45.60	-	-	-	0.05	82.50	51.90	0.20
14	Mar 08, 1993	R	B	-	-	110.00	-	40.30	-	-	-	0.05	88.10	53.70	0.24
14	Apr 05, 1993	R	B	-	-	100.00	-	42.20	-	-	-	0.07	91.70	53.00	0.28
14	Nov 01, 1993	R	B	940.00	410.00	100.00	-	38.50	-	297.00	7.44	0.07	89.40	50.00	0.43
15	Feb 25, 1987	R	B	678.00	330.00	-	26.10	22.70	1.53	261.40	7.90	0.84	51.50	36.51	0.20
15	Mar 10, 1987	R	B	699.00	325.00	-	24.80	23.40	1.50	272.40	7.68	0.78	52.50	36.90	0.06
15	Jul 21, 1987	R	B	580.00	360.59	86.00	-	20.00	1.50	123.00	7.27	1.30	80.25	35.60	0.15
15	Sep 22, 1987	R	B	445.00	341.50	73.00	-	21.00	1.20	226.00	7.25	0.12	49.60	58.60	0.23
15	Dec 08, 1987	R	B	430.00	308.40	87.00	-	22.00	1.70	249.60	7.91	0.07	47.20	34.00	0.10
15	Jan 19, 1988	R	B	473.00	285.80	100.00	-	24.00	1.70	241.20	7.93	0.07	46.00	35.60	0.08
15	Mar 22, 1988	R	B	-	-	84.00	-	22.00	-	-	7.77	-	50.10	38.60	0.12
15	May 22, 1988	R	B	-	-	83.00	-	30.00	-	-	8.78	-	58.00	42.50	0.80
15	Jul 12, 1988	R	B	-	-	92.00	-	30.00	-	-	7.56	-	55.30	38.00	0.18
15	Sep 13, 1988	R	B	-	-	93.00	-	26.00	-	-	7.86	-	52.10	36.50	0.10
15	Dec 14, 1988	R	B	658.00	315.00	90.00	-	-	0.35	250.00	7.89	0.05	49.00	38.00	0.16
15	Jan 17, 1989	R	B	-	-	83.00	-	-	-	-	7.48	-	47.60	32.70	0.15
15	Feb 06, 1990	R	B	-	-	81.00	-	27.77	-	-	-	0.10	68.40	39.40	0.15
15	Apr 17, 1990	R	B	-	-	-	-	20.00	-	-	-	0.10	65.10	36.20	0.20
15	Jun 12, 1990	R	B	-	-	-	-	21.00	-	-	-	0.06	51.60	38.20	1.50
15	Aug 28, 1990	R	B	-	-	93.00	-	28.00	-	-	-	0.06	61.70	36.70	0.15
15	Sep 24, 1990	R	B	-	-	87.00	-	25.30	-	-	-	0.06	51.20	44.30	0.74
15	Oct 30, 1990	R	B	-	-	-	-	23.10	-	-	-	0.07	58.70	45.20	0.11
15	Nov 26, 1990	R	B	-	-	-	-	24.40	-	-	-	0.07	63.00	39.70	0.15
15	Dec 04, 1990	R	B	612.00	340.00	-	-	24.10	-	258.00	-	0.06	69.00	43.80	0.13
15	Jan 29, 1991	R	B	-	-	-	-	24.10	-	-	-	0.07	60.80	49.70	-
15	Feb 19, 1991	R	B	-	-	93.00	-	28.50	-	-	-	0.06	65.70	48.70	0.10
15	Apr 02, 1991	R	B	-	-	99.00	-	-	-	-	-	0.08	63.40	34.90	0.14

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
14	Nov 16, 1992	-	-	-	-	0.010	0.350	0.030	2.0	-	-	-
14	Dec 07, 1992	-	-	-	-	0.010	0.370	0.030	2.0	-	-	-
14	Jan 18, 1993	-	-	-	-	0.010	0.450	0.020	2.0	-	-	-
14	Feb 08, 1993	-	-	-	-	0.010	0.480	0.020	2.0	-	-	-
14	Mar 08, 1993	-	-	-	-	0.010	0.390	0.020	2.0	-	-	-
14	Apr 05, 1993	-	-	-	-	0.010	0.440	0.020	2.0	-	-	-
14	Nov 01, 1993	2.5	-	-	0.090	0.010	0.380	0.020	2.0	-	-	-
15	Feb 25, 1987	1.5<T	<.010<W	<.01<W	<.05<W	<.05<W	1.250	0.155	-	0.70	-	-
15	Mar 10, 1987	1.0<T	<.010<W	0.070	<.05<W	.05<T	3.550	<.005<W	-	0.70	-	-
15	Jul 21, 1987	<1	<.02	-	0.340	<.01	2.550	<.02	-	2.17	-	-
15	Sep 22, 1987	<2.5	-	-	-	-	0.960	<.02	-	0.79	394	-
15	Dec 08, 1987	<2.5	<.02	-	<.05	<.01	3.070	<.02	-	0.90	368	-
15	Jan 19, 1988	<2.5	<.02	-	<.05	<.01	1.720	<.02	-	0.81	-	-
15	Mar 22, 1988	-	-	-	-	<.01	3.600	<.02	-	-	-	-
15	May 22, 1988	-	-	-	-	<.03	3.250	<.01	-	-	-	-
15	Jul 12, 1988	-	-	-	-	0.220	3.650	<.02	-	-	-	-
15	Sep 13, 1988	-	-	-	-	<.01	5.600	<.02	-	-	-	-
15	Dec 14, 1988	<2.5	-	-	-	<.01	4.970	<.02	-	0.25	404	-
15	Jan 17, 1989	-	-	-	-	<.01	1.570	<.02	-	-	-	-
15	Feb 06, 1990	-	-	-	-	0.050	3.060	0.020	-	-	-	-
15	Apr 17, 1990	-	-	-	-	-	-	-	-	-	-	-
15	Jun 12, 1990	-	-	-	-	-	-	-	-	-	-	-
15	Aug 28, 1990	-	-	-	-	-	-	-	-	-	-	-
15	Sep 24, 1990	-	-	-	-	-	-	-	-	-	-	-
15	Oct 30, 1990	-	-	-	-	-	-	-	-	-	-	-
15	Nov 26, 1990	-	-	-	-	-	-	-	-	-	-	-
15	Dec 04, 1990	2.5	-	-	-	-	-	-	-	-	-	-
15	Jan 29, 1991	-	-	-	-	0.050	1.900	0.020	-	-	-	-
15	Feb 19, 1991	-	-	-	-	0.050	2.800	0.010	-	-	-	-
15	Apr 02, 1991	-	-	-	-	0.050	2.200	0.010	-	-	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
15	Apr 15, 1991	R	B	-	-	100.00	-	28.00	-	-	-	0.06	64.10	40.20	0.16
15	May 06, 1991	R	B	-	-	110.00	-	23.10	-	-	-	0.06	61.60	38.60	0.10
15	Jun 03, 1991	R	B	-	-	110.00	-	28.40	-	-	-	0.05	62.70	26.80	0.21
15	Jul 15, 1991	R	B	-	-	100.00	-	28.80	-	-	-	0.05	64.60	15.30	0.18
15	Aug 19, 1991	R	B	-	-	100.00	-	25.80	-	-	-	0.06	68.70	24.80	0.46
15	Sep 30, 1991	R	B	-	-	97.00	-	31.40	-	-	-	0.06	63.60	40.10	0.68
15	Oct 21, 1991	R	B	-	-	100.00	-	30.20	-	-	-	0.06	76.70	25.70	0.29
15	Nov 18, 1991	R	B	-	-	88.00	-	27.30	-	-	-	0.06	64.90	26.40	0.44
15	Dec 09, 1991	R	B	-	-	96.00	-	29.30	-	-	-	0.82	62.50	32.60	0.26
15	Jan 20, 1992	R	B	-	-	130.00	-	31.20	-	-	-	0.07	61.60	31.40	0.35
15	Feb 17, 1992	R	B	-	-	100.00	-	21.80	-	-	-	0.07	62.60	37.10	0.21
15	Mar 09, 1992	R	B	-	-	100.00	-	27.70	-	-	-	0.90	61.40	34.00	0.13
15	Apr 27, 1992	R	B	-	-	98.00	-	31.40	-	-	-	0.94	60.80	39.10	0.21
15	May 04, 1992	R	B	-	-	110.00	-	29.20	-	-	-	0.05	61.10	42.50	0.12
15	Jun 08, 1992	R	B	-	-	86.00	-	27.80	-	-	-	0.57	59.40	39.20	0.25
15	Jul 13, 1992	R	B	-	-	95.00	-	30.40	-	-	-	0.06	58.80	33.10	0.14
15	Aug 03, 1992	R	B	-	-	98.00	-	30.00	-	-	-	0.07	58.30	36.90	0.14
15	Aug 30, 1992	R	B	-	-	86.00	-	26.40	-	-	-	0.83	57.20	32.00	0.34
15	Oct 26, 1992	R	B	-	-	100.00	-	32.60	-	-	-	0.99	61.30	32.20	0.36
15	Nov 16, 1992	R	B	-	-	87.00	-	28.30	-	-	-	1.00	63.00	32.60	0.18
15	Dec 07, 1992	R	B	-	-	77.00	-	29.10	-	-	-	0.80	62.40	36.70	0.46
15	Jan 18, 1993	R	B	-	-	98.00	-	31.40	-	-	-	0.07	63.00	35.10	0.31
15	Feb 08, 1993	R	B	-	-	90.00	-	32.90	-	-	-	0.05	59.50	42.30	0.42
15	Mar 08, 1993	R	B	-	-	88.00	-	31.80	-	-	-	0.05	64.40	33.10	0.28
15	Apr 05, 1993	R	B	-	-	85.00	-	31.10	-	-	-	0.07	62.10	34.40	0.11
15	Nov 01, 1993	R	B	804.00	340.00	94.00	-	29.10	-	256.00	7.61	0.78	64.40	30.40	0.13
16	Aug 28, 1987	R	B	514.00	275.78	120.00	-	9.40	3.40	249.00	7.24	0.13	20.50	49.00	0.21
16	Sep 22, 1987	R	B	402.00	323.50	51.00	-	14.00	2.00	260.00	7.65	0.30	18.30	46.60	3.60
16	Oct 13, 1987	R	B	450.00	327.50	66.00	-	24.00	2.00	286.00	7.31	0.16	5.80	19.00	12.00
16	May 26, 1988	R	B	443.00	308.41	89.00	-	22.00	1.60	256.80	7.87	0.07	53.00	36.80	0.23

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
15	Apr 15, 1991	-	-	-	-	0.050	2.600	0.010	-	-	-	-
15	May 06, 1991	-	-	-	-	0.050	2.400	0.010	-	-	-	-
15	Jun 03, 1991	-	-	-	-	0.010	3.020	0.010	-	-	-	-
15	Jul 15, 1991	-	-	-	-	0.010	3.300	0.010	-	-	-	-
15	Aug 19, 1991	-	-	-	-	0.010	3.600	0.010	-	-	-	-
15	Sep 30, 1991	-	-	-	-	0.010	3.450	0.010	-	-	-	-
15	Oct 21, 1991	-	-	-	-	0.010	1.980	0.010	-	-	-	-
15	Nov 18, 1991	-	-	-	-	0.010	1.180	0.010	-	-	-	-
15	Dec 09, 1991	-	-	-	-	0.010	0.700	0.010	-	-	-	-
15	Jan 20, 1992	-	-	-	-	0.010	2.070	0.010	-	-	-	-
15	Feb 17, 1992	-	-	-	-	0.010	1.820	0.010	-	-	-	-
15	Mar 09, 1992	-	-	-	-	0.010	1.640	0.010	-	-	-	-
15	Apr 27, 1992	-	-	-	-	0.020	1.700	0.010	-	-	-	-
15	May 04, 1992	-	-	-	-	0.030	3.760	0.010	-	-	-	-
15	Jun 08, 1992	-	-	-	-	0.010	1.930	0.010	-	-	-	-
15	Jul 13, 1992	-	-	-	-	0.010	1.630	0.010	-	-	-	-
15	Aug 03, 1992	-	-	-	-	0.010	2.120	0.010	-	-	-	-
15	Aug 30, 1992	-	-	-	-	0.010	1.940	0.010	-	-	-	-
15	Oct 26, 1992	-	-	-	-	0.010	1.530	0.010	-	-	-	-
15	Nov 16, 1992	-	-	-	-	0.010	1.800	0.010	-	-	-	-
15	Dec 07, 1992	-	-	-	-	0.010	1.700	0.010	-	-	-	-
15	Jan 18, 1993	-	-	-	-	0.010	1.980	0.010	-	-	-	-
15	Feb 08, 1993	-	-	-	-	0.010	2.050	0.010	-	-	-	-
15	Mar 08, 1993	-	-	-	-	0.010	1.780	0.010	-	-	-	-
15	Apr 05, 1993	-	-	-	-	0.010	2.180	0.010	-	-	-	-
15	Nov 01, 1993	2.5	-	-	0.090	0.010	1.730	0.010	2.0	-	-	-
16	Aug 28, 1987	2.5	<.02	-	<.05	<.01	1.820	<.02	-	1.07	372	-
16	Sep 22, 1987	15.0	<.02	-	-	-	0.470	<.02	5.0	0.93	440	-
16	Oct 13, 1987	20.0	<.02	-	0.120	0.060	0.820	<.02	-	1.27	338	-
16	May 26, 1988	<2.5	-	-	2.760	0.020	3.110	0.010	-	1.00	-	-

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
16	Jul 13, 1992	-	-	-	-	0.080	0.020	0.010	2.0	-	-	-
17	Sep 21, 1983	.1<W	-	.02<W	0.100	.1<T	3.900	.01<T	-	0.60	-	-
17	Jun 07, 1984	-	-	-	.10<W	.05<W	4.200	.050<W	-	-	-	-
17	Jul 25, 1985	-	-	-	.20<T	-	3.900	-	.8<T	.5<T	-	-
17	Jun 15, 1987	-	-	-	-	0.050	3.650	0.040	-	-	-	-
17	Jul 07, 1987	-	-	-	-	0.100	4.300	0.010	-	-	-	-
17	Mar 05, 1991	<3.0	-	-	-	<0.05	5.000	-	-	-	-	-
17	Mar 1992	6.0	<.4	<0.005	0.100	<0.05	5.000	0.100	<2	0.50	503	-
17	Aug 19, 1992	<.5<W	<.002<W	<.0010<W	.080<T	<.002<W	4.470	.0030<T	<.2<W	.4<T	-	-
17	Oct 05, 1992	.5<T	.003<T	.0015<T	.070<T	<.002<W	4.430	.0020<T	<.2<W	0.50	-	-
17	Dec 07, 1992	1.0<T	<.002<W	.0010<T	.080<T	.006<T	4.500	.0010<T	<.2<W	.4<T	-	-
18	Sep 21, 1983	.1<W	-	.04<T	0.100	.1<T	3.800	.01<T	-	0.60	-	-
18	Jun 07, 1984	-	-	-	.10<W	.05<W	3.900	.005<W	-	-	-	-
18	Jul 25, 1985	-	-	-	.20<T	-	2.800	-	1.0<T	.5<T	-	-
18	Jun 15, 1987	-	-	-	-	0.050	3.300	0.030	-	-	-	-
18	Jul 07, 1987	-	-	-	-	0.100	3.900	0.015	-	-	-	-
18	Sep 08, 1992	<.5<W	<.002<W	.0020<T	.070<T	.004<T	4.460	.0010<T	<.2<W	.2<T	-	-
18	May 03, 1993	.5<T	<.002<W	.0015<T	.100	.008<T	4.250	.0020<T	1.0<T	.4<T	-	-
19	1990	6.0	-	-	-	0.21	<0.1	<0.1	3.0	-	264	-
20	Nov, 1988	5.0	.01	-	<.05	.09	-	-	-	-	351	-
20	Sep 30, 1993	.43	-	<0.005	-	0.510	<.1	<.1	<2	0.80	-	-
21	Aug 01, 1990	<3	-	-	-	<0.050	2.500	<0.100	-	-	433	0.100
21	Jul 01, 1992	-	-	-	-	0.030	3.900	<0.009	-	-	-	0.190
21	Oct 01, 1992	-	-	-	-	<0.030	2.900	<0.009	-	-	-	0.190
21	May 19, 1993	-	-	-	-	0.120	2.900	<0.001	-	-	-	0.118
22	Aug 01, 1990	3.0	-	-	-	0.200	0.100	<0.100	-	-	338	0.100
22	May 01, 1991	-	-	-	-	0.190	3.700	<0.100	-	-	-	<0.100
22	Jul 01, 1992	-	-	-	-	0.130	0.061	<0.009	-	-	-	<0.030
22	Oct 01, 1992	-	-	-	-	0.120	4.700	<0.009	-	-	-	0.300
22	May 11, 1993	-	-	-	-	0.129	0.470	0.005	-	-	-	0.011

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
22	Sep 22, 1993	-	-	-	-	0.160	0.011	<0.009	-	-	-	0.080
23	Aug 01, 1990	<3	-	-	-	0.050	3.000	0.100	-	-	405	<0.100
23	May 01, 1991	-	-	-	-	<0.050	0.600	<0.100	-	-	-	<0.100
23	Jul 01, 1992	-	-	-	-	0.060	1.900	<0.009	-	-	-	0.180
23	Oct 01, 1992	-	-	-	-	<0.030	1.700	<0.009	-	-	-	0.220
23	May 12, 1993	-	-	-	-	<0.005	1.160	<0.001	-	-	-	0.855
23	Sep 27, 1993	-	-	-	-	0.040	1.000	<0.009	-	-	-	0.120
24	Aug 01, 1990	<3	-	-	-	<0.050	4.000	<0.100	-	-	303	0.100
24	May 01, 1991	-	-	-	-	<0.050	3.500	<0.100	-	-	-	<0.100
24	Jul 01, 1992	-	-	-	-	<0.030	1.800	<0.009	-	-	-	0.200
24	Oct 01, 1992	-	-	-	-	<0.030	2.800	<0.009	-	-	-	0.220
24	May 13, 1993	-	-	-	-	<0.005	3.600	0.002	-	-	-	0.055
24	Sep 28, 1993	-	-	-	-	<0.030	3.300	<0.009	-	-	-	0.130
25	Aug 01, 1990	<3	-	-	-	<0.050	0.400	<0.100	-	-	1200	0.300
25	May 01, 1991	-	-	-	-	<0.050	1.900	<0.100	-	-	-	0.200
25	Jul 01, 1992	-	-	-	-	<0.030	<0.007	<0.009	-	-	-	0.290
25	Oct 01, 1992	-	-	-	-	0.030	0.670	<0.009	-	-	-	0.160
25	May 20, 1993	-	-	-	-	0.012	0.610	<0.001	-	-	-	0.128
25	Sep 22, 1993	-	-	-	-	<0.030	0.079	<0.009	-	-	-	0.350
26	Aug 01, 1990	<3	-	-	-	<0.050	0.300	<0.100	-	-	540	0.100
26	May 01, 1991	-	-	-	-	<0.050	-	-	-	-	-	0.600
26	Jul 01, 1992	-	-	-	-	<0.030	1.000	0.012	-	-	-	<0.130
26	May 20, 1993	-	-	-	-	0.012	0.300	<0.001	-	-	-	0.198
26	Sep 22, 1993	-	-	-	-	0.030	0.280	0.013	-	-	-	<0.130
27	Aug 01, 1990	5.0	-	-	-	0.210	0.100	<0.100	-	-	466	<0.100
27	May 01, 1991	-	-	-	-	0.220	0.700	<0.100	-	-	-	0.280
27	Jul 01, 1992	-	-	-	-	0.080	0.470	0.036	-	-	-	0.180
27	Oct 01, 1992	-	-	-	-	0.130	0.530	0.150	-	-	-	0.170
27	May 20, 1993	-	-	-	-	0.016	0.330	0.002	-	-	-	0.134
27	Sep 22, 1993	-	-	-	-	0.310	<0.007	0.013	-	-	-	0.050

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
28	Aug 01, 1990	8.0	-	-	-	0.060	<0.100	<0.100	-	-	328	0.140
28	May 01, 1991	-	-	-	-	0.080	0.500	<0.100	-	-	-	0.120
28	Jul 01, 1992	-	-	-	-	0.220	<0.007	<0.009	-	-	-	<0.001
28	Oct 01, 1992	-	-	-	-	0.030	0.084	<0.009	-	-	-	0.170
28	May 12, 1993	-	-	-	-	<0.005	0.120	0.003	-	-	-	0.045
28	Sep 22, 1993	-	-	-	-	0.100	1.600	<0.009	-	-	-	0.150
29	Aug 01, 1990	<3	-	-	-	<0.050	1.500	<0.100	-	-	293	0.100
29	May 01, 1991	-	-	-	-	<0.050	25.700	<0.100	-	-	-	<0.100
29	Jul 01, 1992	-	-	-	-	<0.030	14.000	<0.009	-	-	-	0.290
29	May 11, 1993	-	-	-	-	0.009	7.200	0.002	-	-	-	0.201
29	Sep 29, 1993	-	-	-	-	<0.030	5.700	<0.009	-	-	-	0.260
30	Aug 01, 1990	<3	-	-	-	<0.050	2.400	<0.100	-	-	714	0.100
30	May 01, 1991	-	-	-	-	0.070	2.500	<0.100	-	-	-	0.230
30	Jul 01, 1992	-	-	-	-	<0.030	2.500	<0.009	-	-	-	0.190
30	Oct 01, 1992	-	-	-	-	<0.030	6.900	<0.009	-	-	-	0.380
30	Sep 27, 1993	-	-	-	-	0.060	-	-	-	-	-	<0.100
31	May 23, 1990	-	-	-	-	-	<0.1	-	-	-	345	-
32	Aug 01, 1990	15.0	-	-	-	<0.050	1.500	0.100	-	-	308	<0.100
32	May 01, 1991	-	-	-	-	<0.050	2.300	<0.100	-	-	-	0.100
32	Jul 01, 1992	-	-	-	-	<0.030	3.300	<0.009	-	-	-	0.180
32	Oct 01, 1992	-	-	-	-	<0.030	5.600	<0.009	-	-	-	0.520
32	May 12, 1993	-	-	-	-	<0.005	5.100	0.012	-	-	-	0.045
32	Sep 21, 1993	-	-	-	-	0.060	6.100	<0.009	-	-	-	0.200
33	May 21, 1981	-	-	-	-	-	1.400	-	-	-	295	-
34	Aug 01, 1990	<3	-	-	-	<0.050	1.200	<0.100	-	-	399	0.200
34	May 01, 1991	-	-	-	-	0.070	2.400	<0.100	-	-	-	<0.100
34	Jul 01, 1992	-	-	-	-	<0.030	1.400	<0.009	-	-	-	0.270
34	Oct 01, 1992	-	-	-	-	0.100	<0.007	<0.009	-	-	-	0.210
34	May 18, 1993	-	-	-	-	0.005	1.180	0.002	-	-	-	0.065
34	Sep 14, 1993	-	-	-	-	0.110	0.013	<0.009	-	-	-	0.150

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
35	Aug 01, 1990	<3	-	-	-	<0.050	1.000	<0.100	-	-	432	0.100
35	May 01, 1991	-	-	-	-	<0.050	1.100	<0.100	-	-	-	<0.100
35	Sep 21, 1993	-	-	-	-	0.060	1.700	<0.009	-	-	-	0.120
36	Jul 08, 1980	-	-	-	-	-	0.800	-	-	-	340	-
37	Aug 01, 1990	<3	-	-	-	<0.050	0.200	<0.100	-	-	484	0.200
37	May 01, 1991	-	-	-	-	<0.050	<0.100	0.300	-	-	-	<0.100
37	Jul 01, 1992	-	-	-	-	<0.030	<0.007	<0.009	-	-	-	<0.130
37	Oct 01, 1992	-	-	-	-	<0.030	<0.007	<0.009	-	-	-	<0.130
37	Sep 13, 1993	-	-	-	-	<0.030	0.061	<0.009	-	-	-	<0.130
38	Aug 01, 1990	9.0	-	-	-	<0.050	2.000	<0.100	-	-	336	0.100
38	May 01, 1991	-	-	-	-	<0.050	1.200	0.400	-	-	-	<0.100
38	Jul 01, 1992	-	-	-	-	<0.030	1.500	<0.009	-	-	-	<0.130
38	Oct 01, 1992	-	-	-	-	<0.030	0.150	<0.009	-	-	-	<0.130
38	Sep 14, 1993	-	-	-	-	0.060	1.500	<0.009	-	-	-	0.150
39	Aug 01, 1990	<3	-	-	-	0.050	<0.100	<0.100	-	-	210	<0.100
39	May 01, 1991	-	-	-	-	0.050	<0.100	<0.100	-	-	-	0.150
39	Jul 01, 1992	-	-	-	-	0.040	<0.007	<0.009	-	-	-	0.300
39	Oct 01, 1992	-	-	-	-	<0.030	0.028	<0.009	-	-	-	<0.130
39	May 18, 1993	-	-	-	-	0.035	<0.010	0.003	-	-	-	0.035
39	Sep 13, 1993	-	-	-	-	0.030	<0.007	<0.009	-	-	-	<0.130
40	Aug 01, 1990	3.0	-	-	-	<0.050	1.100	<0.100	-	-	378	0.100
40	May 01, 1991	-	-	-	-	0.050	1.100	0.500	-	-	-	0.100
40	Jul 01, 1992	-	-	-	-	<0.030	0.900	<0.009	-	-	-	0.200
40	Oct 01, 1992	-	-	-	-	<0.030	0.770	<0.009	-	-	-	0.610
40	May 12, 1993	-	-	-	-	<0.005	0.550	<0.001	-	-	-	0.055
40	Sep 21, 1993	-	-	-	-	0.060	0.460	<0.009	-	-	-	<0.100
41	May 21, 1980	-	-	-	-	-	0.900	-	-	-	520	-
42	Aug 01, 1990	<3	-	-	-	1.800	0.100	<0.001	-	-	1610	<0.100
42	May 01, 1991	-	-	-	-	<0.050	<0.100	<0.001	-	-	-	1.400
42	Jul 01, 1992	-	-	-	-	1.500	<0.007	<0.009	-	-	-	<0.001

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
42	Oct 01, 1992	-	-	-	-	0.330	<0.007	<0.009	-	-	-	3.870
42	May 13, 1993	-	-	-	-	0.390	0.010	<0.001	-	-	-	0.030
42	Sep 13, 1993	-	-	-	-	0.340	<0.007	<0.009	-	-	-	0.070
43	Aug 01, 1990	<3	-	-	-	0.500	<0.100	<0.100	-	-	520	0.100
43	May 01, 1991	-	-	-	-	0.460	<0.100	<0.100	-	-	-	<0.100
43	Jul 01, 1992	-	-	-	-	0.030	<0.007	<0.009	-	-	-	<0.130
43	Oct 01, 1992	-	-	-	-	<0.030	1.100	<0.009	-	-	-	<0.130
43	May 18, 1993	-	-	-	-	0.027	<0.010	0.003	-	-	-	0.053
43	Sep 13, 1993	-	-	-	-	0.480	<0.007	<0.009	-	-	-	0.100
44	Aug 01, 1990	<3	-	-	-	<0.050	3.600	<0.100	-	-	361	0.200
44	May 01, 1991	-	-	-	-	<0.050	5.300	1.900	-	-	-	0.200
44	Jul 01, 1992	-	-	-	-	0.070	4.300	<0.009	-	-	-	<0.090
44	Oct 01, 1992	-	-	-	-	<0.030	3.700	<0.009	-	-	-	-
44	May 13, 1993	-	-	-	-	<0.005	2.500	<0.001	-	-	-	0.105
45	Aug 01, 1990	<3	-	-	-	<0.050	2.200	<0.001	-	-	305	0.100
45	May 01, 1991	-	-	-	-	<0.050	6.400	<0.001	-	-	-	0.100
45	Jul 01, 1992	-	-	-	-	<0.030	2.600	<0.009	-	-	-	0.290
45	Oct 01, 1992	-	-	-	-	<0.030	0.410	<0.009	-	-	-	7.800
45	May 18, 1993	-	-	-	-	<0.005	10.800	0.002	-	-	-	0.215
45	Sep 13, 1993	-	-	-	-	<0.030	0.490	<0.009	-	-	-	0.130
46	May 22, 1980	-	-	-	-	-	1.900	-	-	-	415	-
47	Aug 01, 1990	<3	-	-	-	<0.050	<0.100	<0.100	-	-	391	0.100
47	May 01, 1991	-	-	-	-	<0.050	<0.100	<0.100	-	-	-	0.100
47	Jul 01, 1992	-	-	-	-	0.030	0.009	<0.009	-	-	-	<0.130
47	Oct 01, 1992	-	-	-	-	<0.030	0.980	<0.009	-	-	-	0.270
47	May 18, 1993	-	-	-	-	0.006	0.930	0.003	-	-	-	0.154
47	Sep 13, 1993	-	-	-	-	<0.030	0.510	<0.009	-	-	-	0.190
48	Aug 01, 1990	<3	-	-	-	0.050	<0.100	<0.100	-	-	271	<0.100
48	May 01, 1991	-	-	-	-	<0.050	<0.100	<0.100	-	-	-	0.300
48	Jul 01, 1992	-	-	-	-	<0.030	<0.007	0.011	-	-	-	<0.130

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
48	Oct 01, 1992	-	-	-	-	0.030	<0.007	<0.009	-	-	-	<0.130
48	May 12, 1993	-	-	-	-	0.024	<0.010	<0.001	-	-	-	<0.026
48	Sep 21, 1993	-	-	-	-	0.080	0.014	<0.009	-	-	-	0.090
49	Aug 01, 1990	<3	-	-	-	<0.050	0.600	<0.100	-	-	305	0.100
49	May 01, 1991	-	-	-	-	<0.050	1.100	<0.100	-	-	-	<0.100
49	Jul 01, 1992	-	-	-	-	<0.030	0.520	<0.009	-	-	-	<0.130
49	Oct 01, 1992	-	-	-	-	<0.030	0.470	<0.009	-	-	-	<0.130
49	May 12, 1993	-	-	-	-	<0.005	0.760	<0.001	-	-	-	0.045
49	Sep 28, 1993	-	-	-	-	<0.030	0.560	<0.009	-	-	-	0.130
50	Jul 04, 1980	-	-	-	-	-	0.600	-	-	-	390	-
51	Aug 01, 1990	3.0	-	-	-	0.070	0.100	0.100	-	-	211	<0.100
51	May 01, 1991	-	-	-	-	0.080	<0.100	<0.100	-	-	-	0.320
51	Jul 01, 1992	-	-	-	-	0.070	0.020	<0.009	-	-	-	<0.090
51	May 11, 1993	-	-	-	-	0.102	0.010	0.003	-	-	-	-
51	Sep 27, 1993	-	-	-	-	0.120	0.021	<0.009	-	-	-	0.050
52	Aug 01, 1990	<3	-	-	-	0.050	0.700	<1	-	-	242	<0.1
52	May 01, 1991	-	-	-	-	<0.05	0.800	<1	-	-	-	<0.1
52	Jul 01, 1992	-	-	-	-	0.090	0.830	<0.009	-	-	-	<0.07
52	Oct 01, 1992	-	-	-	-	<0.03	0.590	<0.009	-	-	-	1.800
52	May 11, 1993	-	-	-	-	0.009	0.560	0.002	-	-	-	0.031
52	Sep 21, 1993	-	-	-	-	0.060	0.570	<0.009	-	-	-	0.130
53	Aug 01, 1990	10.0	-	-	-	<0.050	2.300	0.100	-	-	262	0.100
53	May 01, 1991	-	-	-	-	<0.050	3.200	<0.100	-	-	-	0.100
53	Jul 01, 1992	-	-	-	-	<0.030	4.800	<0.009	-	-	-	0.190
53	Oct 01, 1992	-	-	-	-	<0.030	5.900	<0.009	-	-	-	0.510
53	May 11, 1993	-	-	-	-	0.026	4.200	0.002	-	-	-	0.064
53	Sep 27, 1993	-	-	-	-	0.090	4.500	<0.009	-	-	-	0.080
54	Aug 01, 1990	<3	-	-	-	<0.050	1.200	<0.100	-	-	312	0.100
54	May 01, 1991	-	-	-	-	<0.050	0.800	0.100	-	-	-	<0.100
54	May 11, 1993	-	-	-	-	<0.005	0.520	0.004	-	-	-	0.025

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
54	Sep 21, 1993	-	-	-	-	0.070	0.400	<0.009	-	-	-	0.170
55	Aug 01, 1990	<3	-	-	-	0.050	12.000	0.100	-	-	216	<0.100
55	May 01, 1991	-	-	-	-	<0.05	7.200	<0.100	-	-	-	<0.100
55	Jul 01, 1992	-	-	-	-	<0.03	4.600	<0.009	-	-	-	<0.130
55	May 25, 1993	-	-	-	-	0.009	6.500	<0.001	-	-	-	0.171
55	Sep 27, 1993	-	-	-	-	0.040	4.400	<0.009	-	-	-	0.150
56	Aug 01, 1990	<3	-	-	-	0.050	<0.100	<0.100	-	-	316	<0.100
56	May 01, 1991	-	-	-	-	<0.050	0.600	0.100	-	-	-	0.100
56	Jul 01, 1992	-	-	-	-	0.030	0.200	<0.009	-	-	-	<0.130
56	Oct 01, 1992	-	-	-	-	<0.030	<0.007	<0.009	-	-	-	0.510
56	May 25, 1993	-	-	-	-	0.015	<0.100	<0.100	-	-	-	<0.035
56	Sep 27, 1993	-	-	-	-	0.070	<0.007	<0.009	-	-	-	0.280
57	Aug 01, 1990	<3	-	-	-	<0.050	0.200	<0.100	-	-	473	<0.100
57	May 01, 1991	-	-	-	-	<0.050	1.000	<0.100	-	-	-	<0.100
57	Jul 01, 1992	-	-	-	-	<0.030	1.300	<0.009	-	-	-	0.210
57	Oct 01, 1992	-	-	-	-	0.050	1.300	<0.009	-	-	-	3.550
57	May 11, 1993	-	-	-	-	0.007	9.900	0.003	-	-	-	0.243
57	Sep 27, 1993	-	-	-	-	0.080	2.300	<0.009	-	-	-	0.110
58	May 23, 1980	-	-	-	-	-	4.100	-	-	-	305	-
59	May 23, 1980	-	-	-	-	-	1.400	-	-	-	310	-
60	Aug 01, 1990	<3	-	-	-	<0.050	0.900	<0.100	-	-	470	0.200
60	May 01, 1991	-	-	-	-	<0.050	0.600	<0.100	-	-	-	0.200
60	Jul 01, 1992	-	-	-	-	<0.030	0.390	<0.009	-	-	-	<0.130
60	Oct 01, 1992	-	-	-	-	<0.030	0.340	<0.009	-	-	-	1.700
60	May 25, 1993	-	-	-	-	0.010	0.310	<0.001	-	-	-	0.120
60	Sep 27, 1993	-	-	-	-	0.080	0.380	<0.009	-	-	-	0.170
61	May 23, 1980	-	-	-	-	-	1.500	-	-	-	455	-
62	Aug 01, 1990	<3	-	-	-	<0.050	0.100	<0.100	-	-	258	<0.100
62	May 01, 1991	-	-	-	-	<0.050	<0.100	<0.100	-	-	-	0.100
62	Jul 01, 1992	-	-	-	-	<0.030	0.037	<0.009	-	-	-	<0.130

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
62	Oct 01, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	2.50
62	May 25, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	0.50
62	Sep 27, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	-
63	May 23, 1980	R	B	398.00	213.00	64.00	13.00	4.00	1.00	197.00	7.80	0.10	2.00	23.00	-
64	Aug 01, 1990	R	B	-	270.00	84.00	-	6.80	-	-	-	-	14.00	21.40	<0.3
64	May 01, 1991	R	B	-	-	-	-	-	-	-	-	-	-	-	<0.3
64	Jul 01, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	-
64	Oct 01, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	0.50
64	May 13, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	0.10
64	Sep 28, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	-
65	Aug 01, 1990	R	B	-	744.00	196.00	-	120.00	-	-	-	-	392.00	96.50	1.20
65	May 01, 1991	R	B	-	-	-	-	-	-	-	-	-	-	-	0.40
65	Jul 01, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	1.60
65	Oct 01, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	0.90
65	May 25, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	0.50
65	Sep 27, 1993	R	B	-	-	-	-	-	-	-	-	-	-	-	-
66	May 15, 1980	R	B	850.00	487.00	87.00	66.00	15.00	3.40	410.00	8.00	0.20	14.00	87.00	-
67	Feb 02, 1984	U	I	1340.00	582.00	196.00	22.50	40.00	2.00	234.00	7.68	-	58.80	2.50	-
68	May 26, 1980	R	B	820.00	454.00	151.00	19.00	12.00	0.70	307.00	7.60	0.10	52.00	78.00	-
69	Apr 05, 1977	U	I	670.00	385.00	122.00	20.00	5.00	1.00	286.00	7.40	-	34.00	54.00	-
70	May 15, 1980	R	B	3300.00	1100.00	260.00	109.00	360.00	17.00	185.00	7.50	0.30	677.00	680.00	-
71	Jul 07, 1980	R	B	939.00	466.00	155.00	19.00	35.00	2.70	316.00	7.30	0.20	57.00	114.00	-
72	Jan 16, 1984	T	I	1250.00	479.90	85.00	65.00	87.00	7.40	155.20	8.20	-	74.20	397.90	-
73	Sep 11, 1985	U	I	509.00	253.50	73.00	17.30	9.40	3.00	235.80	7.19	-	4.20	29.00	-
74	Jan 25, 1985	U	I	687.00	386.70	112.00	26.00	5.50	1.70	370.60	7.54	-	1.40	25.50	-
75	Jun 04, 1986	R	I	690.00	4.00	1.40	0.10	159.00	0.29	360.30	7.81	-	2.00	18.50	-
76	Dec 04, 1984	U	I	550.00	290.20	75.00	25.00	7.50	1.40	262.80	7.64	-	4.40	35.00	-
77	May 20, 1980	R	B	800.00	328.00	120.00	7.00	57.00	0.50	258.00	7.60	0.10	24.00	72.00	-
78	Sep 04, 1990	R	I	2400.00	605.00	185.30	34.55	274.80	8.54	324.20	7.94	-	563.00	42.18	-
78	Sep 04, 1990	T	I	2540.00	26.40	6.00	2.80	558.70	4.49	324.90	8.04	-	575.00	42.53	-

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
62	Oct 01, 1992	-	-	-	-	<0.030	0.034	<0.009	-	-	-	0.910
62	May 25, 1993	-	-	-	-	0.021	0.020	0.001	-	-	-	0.029
62	Sep 27, 1993	-	-	-	-	0.070	0.079	<0.009	-	-	-	<0.090
63	May 23, 1980	-	-	-	-	-	<0.1	-	-	-	265	-
64	Aug 01, 1990	3.0	-	-	-	<0.050	1.800	<0.100	-	-	327	0.100
64	May 01, 1991	-	-	-	-	<0.050	2.000	<0.100	-	-	-	<0.100
64	Jul 01, 1992	-	-	-	-	0.030	2.900	<0.009	-	-	-	<0.130
64	Oct 01, 1992	-	-	-	-	<0.030	2.800	<0.009	-	-	-	<0.130
64	May 13, 1993	-	-	-	-	0.005	2.500	<0.001	-	-	-	0.105
64	Sep 28, 1993	-	-	-	-	<0.030	2.200	<0.009	-	-	-	0.130
65	Aug 01, 1990	3.0	-	-	-	<0.050	2.400	<0.100	-	-	15.40	0.200
65	May 01, 1991	-	-	-	-	<0.050	5.600	1.100	-	-	-	<0.100
65	Jul 01, 1992	-	-	-	-	<0.030	1.800	<0.009	-	-	-	0.340
65	Oct 01, 1992	-	-	-	-	<0.030	1.700	<0.009	-	-	-	0.370
65	May 25, 1993	-	-	-	-	0.010	3.800	<0.001	-	-	-	0.200
65	Sep 27, 1993	-	-	-	-	<0.030	2.500	<0.009	-	-	-	0.420
66	May 15, 1980	-	-	-	-	-	0.100	-	-	-	575	-
67	Feb 02, 1984	-	-	-	3<T	1<W	66.000	.1	-	-	-	-
68	May 26, 1980	-	-	-	-	-	2.700	-	-	-	540	-
69	Apr 05, 1977	-	-	-	.1	<.1	<.1	<.01	-	-	-	-
70	May 15, 1980	-	-	-	-	-	15.000	-	-	-	2590	-
71	Jul 07, 1980	-	-	-	3<T	.1	0.400	.01<T	-	-	701	-
72	Jan 16, 1984	-	-	-	.6<T	.05<T	1.350	.26	-	-	-	-
73	Sep 11, 1985	-	-	-	.15<T	.1<W	.05<W	.005<W	.8<T	-	-	-
74	Jan 25, 1985	-	-	-	<.2<W	<.05<W	<.05<W	<.005<W	-	-	-	-
75	Jun 04, 1986	-	-	-	-	.05<W	.05<W	.005<W	0.8	-	-	-
76	Dec 04, 1984	-	-	-	-	-	19.000	-	-	-	530	-
77	May 20, 1980	-	-	-	<.1	<.05	5.400	<.005	-	-	-	-
78	Sep 04, 1990	-	-	-	<.1	<.05	5.850	<.005	-	-	-	-
78	Sep 04, 1990	-	-	-	<.1	<.05	5.850	<.005	-	-	-	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	CONDUCTIVITY (umhos/cm @ 25C)	HARDNESS as CaCO3	Ca	Mg	Na	K	ALKAL. as CaCO3	pH	F	Cl	SO4	TURB. (FTU)
78	Nov 06, 1990	R	I	2650.00	591.10	177.60	35.90	308.50	8.73	394.00	7.95	-	596.00	60.43	-
79	Nov 06, 1990	R	I	1046.00	404.20	115.50	28.10	57.70	4.41	317.00	8.05	-	109.00	60.43	-
80	May 26, 1980	R	B	661.00	332.00	118.00	9.00	15.00	0.70	274.00	7.30	0.10	26.00	47.00	-
81	May 18, 1977	U	I	990.00	515.00	138.00	41.00	15.00	2.00	259.00	-	-	172.00	54.00	-
82	May 16, 1980	R	B	600.00	337.00	110.00	15.00	12.00	2.40	280.00	7.90	0.20	5.00	46.00	-
83	Apr 25, 1978	U	I	610.00	327.00	82.00	30.00	9.00	6.90	297.00	7.50	-	8.00	50.00	-
84	May 26, 1980	R	B	1445.00	738.00	227.00	41.00	37.00	5.30	417.00	7.50	0.20	219.00	89.00	-
85	May 20, 1980	R	B	900.00	305.00	111.00	7.00	78.00	1.40	254.00	7.60	0.10	114.00	38.00	-
86	May 21, 1980	R	B	660.00	355.00	115.00	16.00	12.00	0.80	296.00	7.60	0.10	24.00	36.00	-
87	May 21, 1980	R	B	378.00	199.00	59.00	12.00	8.00	0.80	199.00	8.10	0.40	1.00	16.00	-
88	Oct 01, 1982	R	B	582.00	291.00	-	-	11.50	1.60	-	-	-	20.40	27.50	-
89	Aug 17, 1982	R	B	630.00	323.30	-	-	6.00	5.95	306.20	8.30	-	4.00	33.00	-
89	Apr 18, 1983	R	B	599.00	309.20	-	-	-	-	282.40	7.62	-	8.00	-	-
89	Jun 27, 1984	R	B	641.00	349.20	-	-	5.40	6.50	299.80	7.38	-	8.60	33.00	-
90	Aug 17, 1982	R	B	680.00	369.60	-	-	4.20	2.85	357.40	8.09	-	22.40	34.00	-
91	Dec, 1990	R	B	462.00	440.00	103.00	20.20	6.45	1.73	327.00	7.40	-	2.80	23.00	-
91	Mar, 1992	R	B	478.00	421.00	114.00	24.20	8.25	2.01	411.00	7.09	-	7.42	20.06	-
92	Dec, 1990	R	B	3200.00	880.00	112.00	143.00	485.00	153.00	2242.00	6.70	-	173.00	7.00	-
92	Mar, 1992	R	B	2750.00	990.00	144.00	146.00	411.00	132.00	2437.00	6.77	-	162.00	2.52	-
93	Dec, 1990	R	B	441.00	240.00	62.10	27.40	15.30	2.92	238.00	7.40	-	15.80	35.00	-
94	Aug 17, 1982	R	B	622.00	342.20	-	-	4.40	1.80	349.00	8.36	-	9.80	24.00	-
94	Apr 18, 1983	R	B	600.00	322.30	-	-	-	-	301.60	7.48	-	5.80	-	-
94	Jun 27, 1984	R	B	516.00	295.60	-	-	2.50	1.25	269.60	7.29	-	3.40	19.00	-
95	Jul 15, 1991	R	B	684.00	293.00	81.30	21.80	22.50	1.00	232.00	7.65	<0.1	44.70	25.50	<1
96	Jul 17, 1991	R	B	740.00	319.00	87.10	24.60	23.90	1.10	261.00	7.64	<0.1	45.00	25.20	<1
97	May 21, 1980	R	B	860.00	401.00	104.00	34.00	27.00	16.00	294.00	7.70	0.10	51.00	65.00	-
98	Oct 04, 1991	R	B	403.00	250.10	62.00	23.20	3.09	0.90	212.00	8.04	<0.5	2.10	21.50	<1
99	Oct 04, 1991	R	B	610.00	338.50	86.70	29.70	22.40	1.37	212.00	8.16	<0.5	33.60	23.00	<1

SITE #	DATE SAMPLED	COLOUR (TCU)	PHOSPHOROUS	PHOSPHATES	TKN	AMMONIUM	NITRATES NO3	NITRITE NO2	PHENOLICS (ug/l)	DOC	TDS	ORGANIC NITROGEN
78	Nov 06, 1990	-	-	-	<.15	<.05	5.400	<.005	-	-	-	-
79	Nov 06, 1990	-	-	-	3	<.05	4.200	<.005	-	-	-	-
80	May 26, 1980	-	-	-	-	-	2.500	-	-	-	400	-
81	May 18, 1977	-	-	-	2	<.1	0.200	<.01	-	-	-	-
82	May 16, 1980	-	-	-	-	-	3.600	-	-	-	375	-
83	Apr 25, 1978	-	-	-	.5	<.1	<.1	<.01	-	-	-	-
84	May 26, 1980	-	-	-	-	-	<.0.1	-	-	-	1020	-
85	May 20, 1980	-	-	-	-	-	4.800	-	-	-	535	-
86	May 21, 1980	-	-	-	-	-	3.300	-	-	-	400	-
87	May 21, 1980	-	-	-	-	-	0.200	-	-	-	225	-
88	Oct 01, 1982	-	.01<T	.02	.1<T	.1	3.300	-	-	-	-	-
89	Aug 17, 1982	-	0.080	.02<T	3<T	.1<W	3.400	-	-	1.60	-	-
89	Apr 18, 1983	-	-	-	-	-	-	-	1.8	1.20	-	-
89	Jun 27, 1984	-	-	-	.30<T	.05<W	5.150	-	1.0<T	27.50	-	-
90	Aug 17, 1982	-	.04<T	.02<T	.1<T	.1<W	1.200	-	-	1.00	-	-
91	Dec, 1990	-	<.0.4	-	0.350	<.0.03	1.120	<.005	<.1	-	-	-
91	Mar, 1992	-	<.0.4	-	0.190	0.080	1.540	<.001	<.1	8.60	-	-
92	Dec, 1990	-	<.0.4	-	104.000	79.500	0.770	<.005	16.0	-	-	-
92	Mar, 1992	-	<.0.4	-	128.000	67.300	<.0.10	<.0.1	19.0	41.30	-	-
93	Dec, 1990	-	<.0.4	-	<.006	<.003	0.290	<.005	<.1	-	-	-
94	Aug 17, 1982	-	0.500	.02<T	1.200	0.300	0.300	-	-	3.30	-	-
94	Apr 18, 1983	-	-	-	-	-	-	-	.4<T	2.00	-	-
94	Jun 27, 1984	-	-	-	.30<T	-	.05<W	-	.8<T	3.70	-	-
95	Jul 15, 1991	<.1	-	-	0.300	0.100	1.900	<.0.1	<.2	-	-	-
96	Jul 17, 1991	<.1	-	-	0.700	0.120	1.800	<.0.1	<.2	-	-	-
97	May 21, 1980	-	-	-	-	-	12.000	-	-	-	565	-
98	Oct 04, 1991	<.5.0	-	-	-	<.1.7	3.900	<.0.15	-	-	196	-
99	Oct 04, 1991	<.5.0	-	-	-	<.1.7	11.700	<.0.15	-	-	66	-

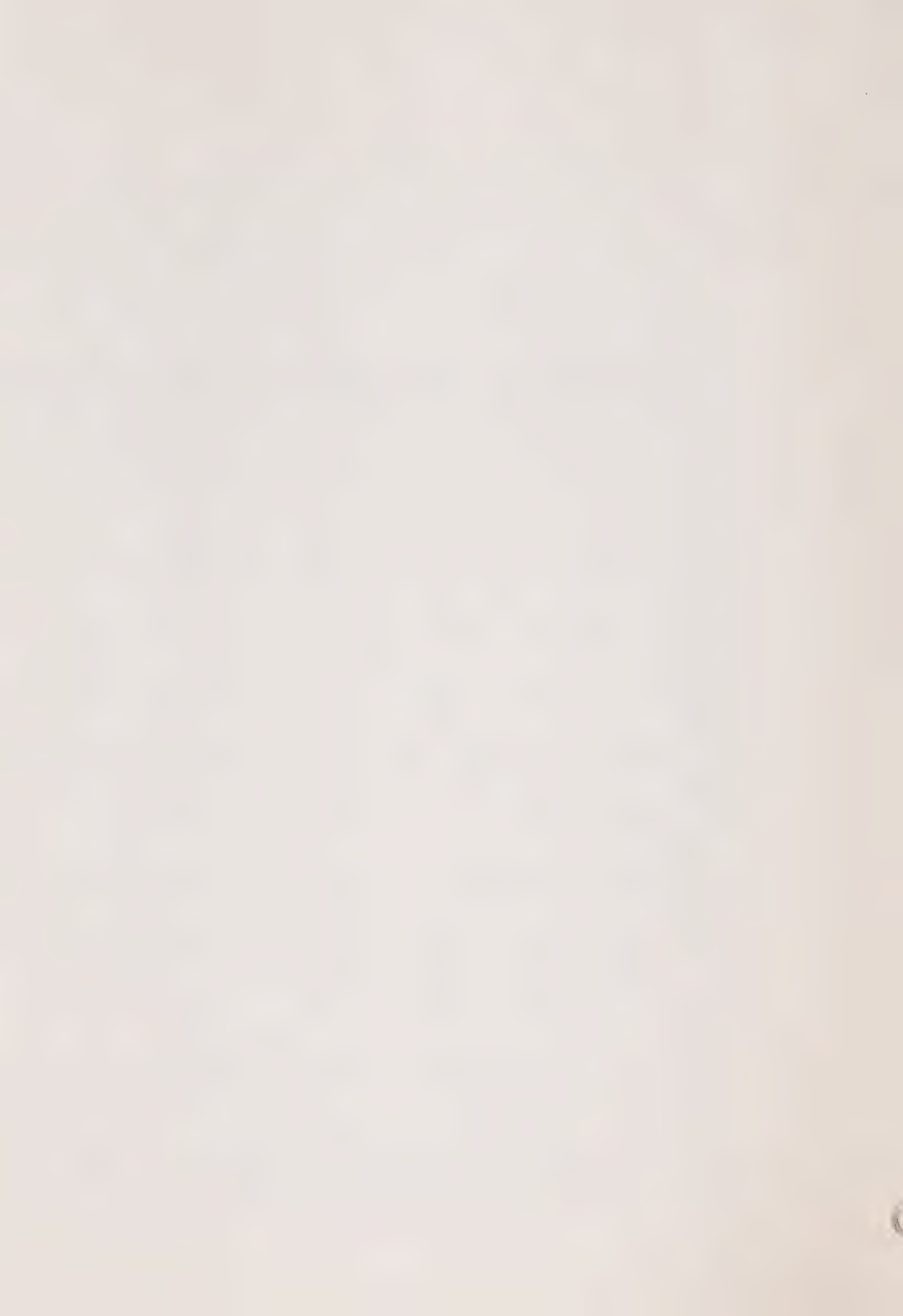
WATER QUALITY DATA: HEAVY METAL PARAMETERS FOR OVERBURDEN WELLS

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	Ag UG/L	Al UG/L	As UG/L	Ba UG/L	B UG/L	Be UG/L	Cd UG/L	Cn UG/L	Co UG/L	Cr UG/L	Cu UG/L	Fe UG/L	Hg UG/L
1	Sep 17, 1987	R	B	-	0.006	<1.00<	66.000	30.00<T	-	<30<	-	-	3.000	<.10<	5.000	-
1	Dec 21, 1987	R	B	-	24.000	<1.00<	71.000	46.00<T	-	<30<	-	-	2.400	<.10<	<3.00<	-
1	May 18, 1988	R	B	-	2.800	.39<T	82.000	27.000	-	.06<T	-	-	22<T	1.100	<\$5.00<W	-
1	Sep 20, 1989	R	B	-	11.000	.59<T	110.000	60.000	-	<.05<W	-	-	4.000	2.000	22.00<T	-
1	May 22, 1990	U	B	-	48.000	<.1<W	110.000	45.000	-	<.05<W	-	-	3.900	.50<W	23<T	-
1	May 22, 1990	R	B	-	22.000	.24<T	96.000	130.000	-	<.05<W	-	-	4.20<T	2.10<T	23.00<T	-
1	Jan 31, 1991	R	B	<.05<W	1.800	-	120.000	-	-	<.05<W	-	23<T	2.6<T	2.600	23<T	-
1	Jan 31, 1991	T	B	<.05<W	1.600	-	120.000	-	-	<.05<W	-	27<T	.54<T	16.000	<6<W	-
1	Jun 18, 1991	R	B	-	<.10<W	.36<T	110.000	33.000	-	<.05<W	-	-	<.50<W	.54<T	<6.00<W	-
1	Oct 09, 1991	T	B	<.05<W	2.600	.43<T	110.000	38.000	<.005<W	<.001<W	<1.00<W	.14<T	<.50<W	6.500	<6<W	<.02<W
1	Mar 02, 1992	R	B	-	1.200	.14<T	37.000	12.00<T	-	<.05<W	-	-	.87<T	3.80<T	140.000	-
1	May 27, 1992	R	B	-	4.400	1.100	100.000	38.000	-	<.05<W	-	-	.53<T	2.00<T	46.00<T	-
1	Mar 10, 1993	R	B	-	52.000	<.10<W	150.000	30.000	-	<.05<W	-	-	.86<T	6.800	200.000	-
1	Jan 27, 1993	R	B	-	-	.68<T	130.000	40.000	-	<.05<W	-	-	3.5<T	1.10<T	8.50<T	-
1	Jun 02, 1993	R	B	-	2.200	.37<T	110.000	34.000	-	<.05<W	-	-	<.50<W	1.60<T	8.20<T	-
1	Dec 12, 1993	R	B	-	2.700	<.05<W	110.000	45.000	-	<.05<W	-	-	1.300	.84<T	27.00<T	-
2	Sep 17, 1987	R	B	-	10.000	<1.00<	77.000	40.00<T	-	<.30<	-	-	3.000	<1.00<	38.000	-
2	Dec 21, 1987	R	B	-	13.000	<1.00<	71.000	46.00<T	-	<.30<	-	-	2.900	2.500	<3.00<	-
2	May 18, 1988	R	B	-	3.100	.49<T	100.000	37.000	-	<.05<W	-	-	.32<T	1.00<T	40.00<T	-
2	Sep 20, 1989	R	B	-	9.700	.55<T	110.000	47.000	-	<.05<W	-	-	2.200	36.000	74.000	-
2	May 22, 1990	R	B	-	28.000	.23<T	120.000	230.000	-	.07<T	-	-	7.800	1.50<T	73.000	-
2	Jun 18, 1991	R	B	-	<.10<W	.13<T	100.000	39.000	-	<.05<W	-	-	<.50<W	<.50<W	<6.00<W	-
2	Mar 02, 1992	R	B	-	1.200	.49<T	110.000	30.000	-	<.05<W	-	-	.65<T	1.40<T	24.00<T	-
2	May 27, 1992	R	B	-	3.900	.78<T	100.000	38.000	-	<.05<W	-	-	.60<T	2.10<T	61.000	-
2	Jan 27, 1993	R	B	-	1.900	.87<T	130.000	36.000	-	<.05<W	-	-	2.00<T	1.20<T	8.20<T	-
2	Mar 10, 1993	R	B	-	120.000	<.10<W	160.000	29.000	-	<.05<W	-	-	1.00<T	15.000	420.000	-
2	Jun 02, 1993	R	B	-	2.100	.27<T	110.000	34.000	-	<.05<W	-	-	<.50<W	1.40<T	<6.00<W	-

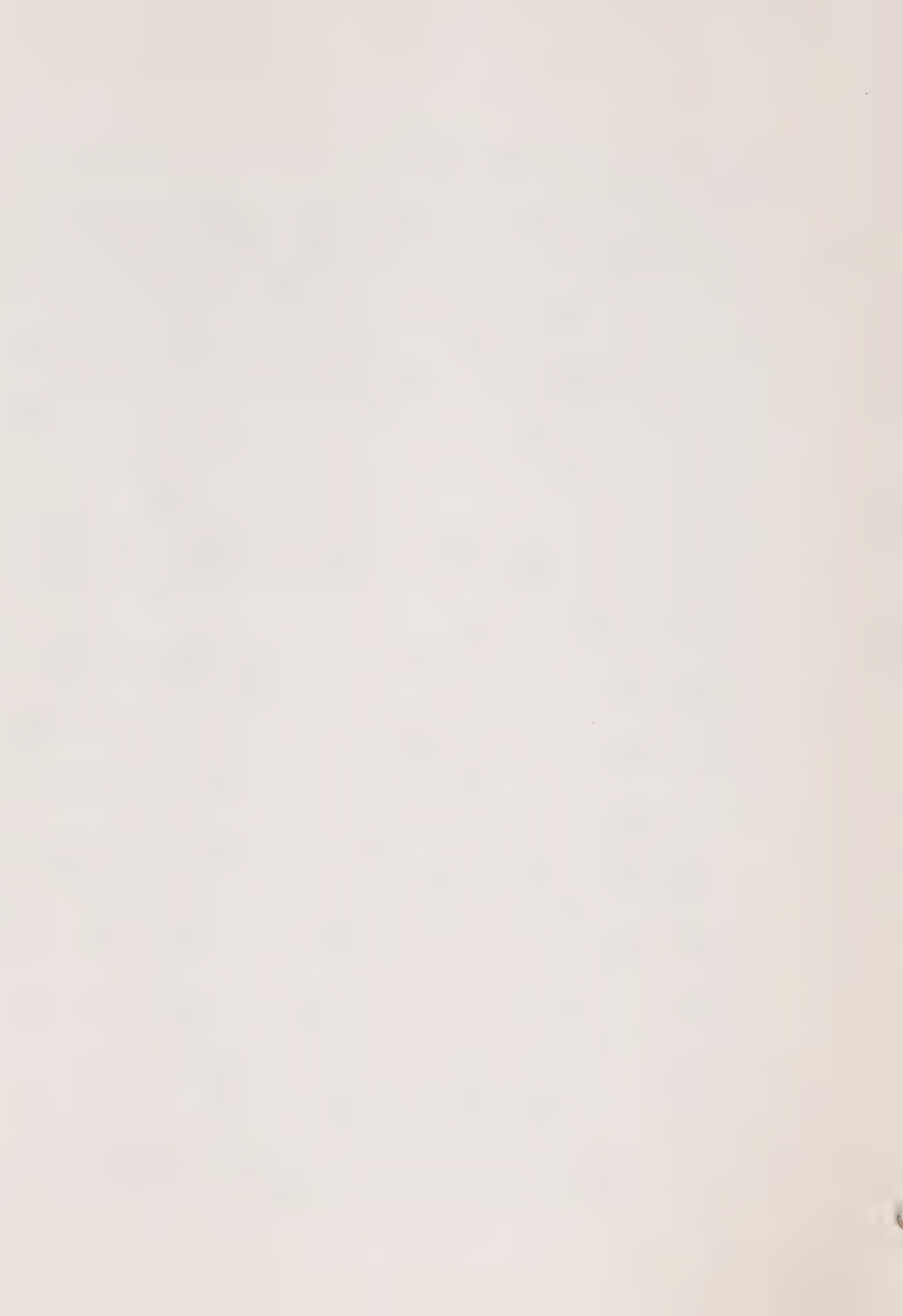
SITE #	DATE SAMPLED	Mn UG/L	Mo UG/L	Ni UG/L	Pb UG/L	Sb UG/L	Se UG/L	Sr UG/L	Ti UG/L	Tl UG/L	U UG/L	V UG/L	Zn UG/L
1	Sep 17, 1987	1.000	-	1.000	<.003<	-	<1.00<	-	-	-	-	-	8.000
1	Dec 21, 1987	1.400	-	<1.00<	<3.00<	-	<1.00<	-	-	-	-	-	3.200
1	May 18, 1988	.21<T	-	<.10<W	0.330	-	1.40<T	-	-	-	-	-	4.200
1	Sep 20, 1989	88.000	-	<.10<W	0.350	-	<1.00<W	-	-	-	-	-	8.000
1	May 22, 1990	14.000	-	<.20<W	.05<W	-	<1.00<W	-	-	-	-	-	-
1	May 22, 1990	.26<T	-	<.20<W	.38<T	-	<1.00<W	-	-	-	-	-	6.700
1	Jan 31, 1991	.17<T	-	.69<T	.32<T	-	<1.00<W	-	-	-	-	-	5.200
1	Jan 31, 1991	.08<T	-	1.10<T	.41<T	-	<1.00<W	-	-	-	-	-	.37<T
1	Jun 18, 1991	<.05<W	-	<.20<W	<.05<W	-	<1.00<W	-	-	-	-	-	<.20<W
1	Oct 09, 1991	3.600	.27<T	.75<T	.45<T	.32<T	1.10<T	3.40	2.60<T	<.05<W	.67	.07<T	11.000
1	Mar 02, 1992	4.400	-	2.900	1.600	-	<1.00<W	-	-	-	-	-	140.000
1	May 27, 1992	2.600	-	.38<T	3.200	-	1.20<T	-	-	-	-	-	3.200
1	Mar 10, 1993	44.000	-	<.20<W	1.700	-	<1.00<W	-	-	-	-	-	3.800
1	Jan 27, 1993	.16<T	-	<.20<W	.15<T	-	<1.00<W	-	-	-	-	-	2.600
1	Jun 02, 1993	0.530	-	4.500	.06<T	-	<1.00<W	-	-	-	-	-	17.000
1	Dec 12, 1993	.47<T	-	<.10<W	0.260	-	.39<T	-	-	-	-	-	4.600
2	Sep 17, 1987	3.000	-	1.000	<.003<	-	<1.00<	-	-	-	-	-	17.000
2	Dec 21, 1987	1.400	-	2.500	<3.00<	-	<1.00<	-	-	-	-	-	7.100
2	May 18, 1988	0.990	-	<.10<W	0.280	-	2.40<T	-	-	-	-	-	9.200
2	Sep 20, 1989	2.400	-	<.10<W	1.800	-	1.30<T	-	-	-	-	-	10.000
2	May 22, 1990	3.600	-	<.20<W	.46<T	-	<1.00<W	-	-	-	-	-	42.000
2	Jun 18, 1991	<.05<W	-	<.20<W	<.05<W	-	1.60<T	-	-	-	-	-	<.20<W
2	Mar 02, 1992	.16<T	-	4.600	.16<T	-	<1.00<W	-	-	-	-	-	3.400
2	May 27, 1992	4.400	-	1.30<T	4.200	-	<1.00<W	-	-	-	-	-	4.200
2	Jan 27, 1993	.23<T	-	<.20<W	.12<T	-	1.50<T	-	-	-	-	-	2.800
2	Mar 10, 1993	110.000	-	<.20<W	2.600	-	1.30<T	-	-	-	-	-	6.300
2	Jun 02, 1993	.41<T	-	4.700	<.05<W	-	<1.00<W	-	-	-	-	-	14.000

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	Ag UG/L	Al UG/L	As UG/L	Ba UG/L	B UG/L	Be UG/L	Cd UG/L	Cn UG/L	Co UG/L	Cr UG/L	Cu UG/L	Fe UG/L	Hg UG/L
2	Dec 12, 1993	R	B	-	3.50	.16<T	120,000	95,000	-	<.05<W	-	-	7.100	1,600	14,00<T	-
3	Jan 24, 1986	R	B	<.10<	<4.00<	1.000	150,000	30,000	-	<.30<	<1.00<W	1.000	<1.00<	2,000	120,000	-
3	Sep 17, 1987	R	B	-	7.000	<1.00<	16,000	20,00<T	-	<.30<	-	-	3,000	<1,00<	<3,00<	-
3	Dec 21, 1987	R	B	-	19,000	<1.00<	17,000	43,00<T	-	<.30<	-	-	3,000	2,000	<3,00<	-
3	May 16, 1988	R	B	-	2,400	.69<T	21,000	21,000	-	<.05<W	-	-	.45<T	1,800	<5,00<W	-
3	Dec 22, 1988	R	B	-	2,000	.16<T	28,000	120,000	-	<.05<W	-	-	15,000	1,800	5,00<W	-
3	May 23, 1990	R	B	-	16,000	.42<T	35,000	170,000	-	<.05<W	-	-	8,600	5,700	<6,00<W	-
3	Jun 18, 1991	R	B	-	1,400	<.10<W	28,000	24,000	-	.07<T	-	-	5,400	2,60<T	<6,00<W	-
3	Oct 08, 1991	T	B	<.05<W	1,200	.19<T	34,000	31,000	<0.05<W	.09<T	<1.00<W	<.02<W	2.3<T	3.60<T	<6,00<W	<.02<W
3	Mar 02, 1992	R	B	-	.73<T	.81<T	33,000	26,000	-	.06<T	-	-	1.10<T	2.30<T	<6,00<W	-
3	May 27, 1992	R	B	-	3,200	3,800	41,000	43,000	-	.07<T	-	-	.82<T	5,400	14,00<T	-
3	Jan 25, 1993	R	B	-	2,000	.23<T	34,000	38,000	-	<.05<W	-	-	3.60<T	4.50<T	<6,00<W	-
3	Mar 18, 1993	R	B	-	1,400	<.10<W	41,000	48,000	-	<.05<W	-	-	2.90<T	2.50<T	<6,00<W	-
3	Jun 02, 1993	R	B	-	1,800	1,100	30,000	34,000	-	<.05<W	-	-	.72<T	2.70<T	<6,00<W	-
4	Jan 29, 1986	R	B	<.10<	5,000	1,000	120,000	-	-	<.30<	<1.00<W	1,000	<1.00<	12,000	100,000	-
4	Sep 17, 1987	R	B	-	7,000	<1.00<	17,000	30,00<T	-	<.30<	-	-	3,000	<1,00<	<3,00<	-
4	Dec 21, 1987	R	B	-	37,000	<1.00<	17,000	47,00<T	-	<.30<	-	-	3,000	2,000	<3,00<	-
4	May 16, 1988	R	B	-	2,700	.47<T	21,000	17,00<T	-	<.05<W	-	-	.51<T	1,200	<5,00<W	-
4	Dec 22, 1988	R	B	-	6,600	.29<T	25,000	44,000	-	<.05<W	-	-	3,200	1,600	5,00<W	-
4	May 23, 1990	R	B	-	17,000	.49<T	29,000	180,000	-	<.05<W	-	-	8,600	2,50<T	<6,00<W	-
4	Jun 18, 1991	R	B	-	1,200	<.10<W	28,000	23,000	-	<.05<W	-	-	5,700	2,60<T	<6,00<W	-
4	Mar 02, 1992	R	B	-	1,100	.84<T	32,000	26,000	-	<.05<W	-	-	1.10<T	3.10<T	34,00<T	-
4	May 27, 1992	R	B	-	3,100	1,800	36,000	44,000	-	<.50<W	-	-	1.30<T	4.10<T	13,00<T	-
4	Mar 18, 1993	R	B	-	1,400	<.10<W	38,000	43,000	-	<.05<W	-	-	2.20<T	2.40<T	54,00<T	-
4	Jun 02, 1993	R	B	-	2,000	.29<T	30,000	35,000	-	<.05<W	-	-	.81<T	2.70<T	12,00<T	-
5	Sep 17, 1987	R	B	-	<3.00<	<1.00<	94,000	50,00<T	-	<.30<	-	-	3,000	3,000	2,300	-
5	Dec 21, 1987	R	B	-	12,000	<1.00<	95,000	53,000	-	<.30<	-	-	3,000	<1,00<	330,000	-
5	May 16, 1988	R	B	-	3,400	.60<T	160,000	52,000	-	<.05<W	-	-	1,500	8,200	13,00<T	-
5	Dec 22, 1988	R	B	-	5,100	<.05<W	140,000	56,000	-	<.05<W	-	-	3,100	1,500	350,000	-
5	May 23, 1990	R	B	-	28,000	.27<T	120,000	78,000	-	.06<T	-	-	1,60<T	2,00<T	86,000	-

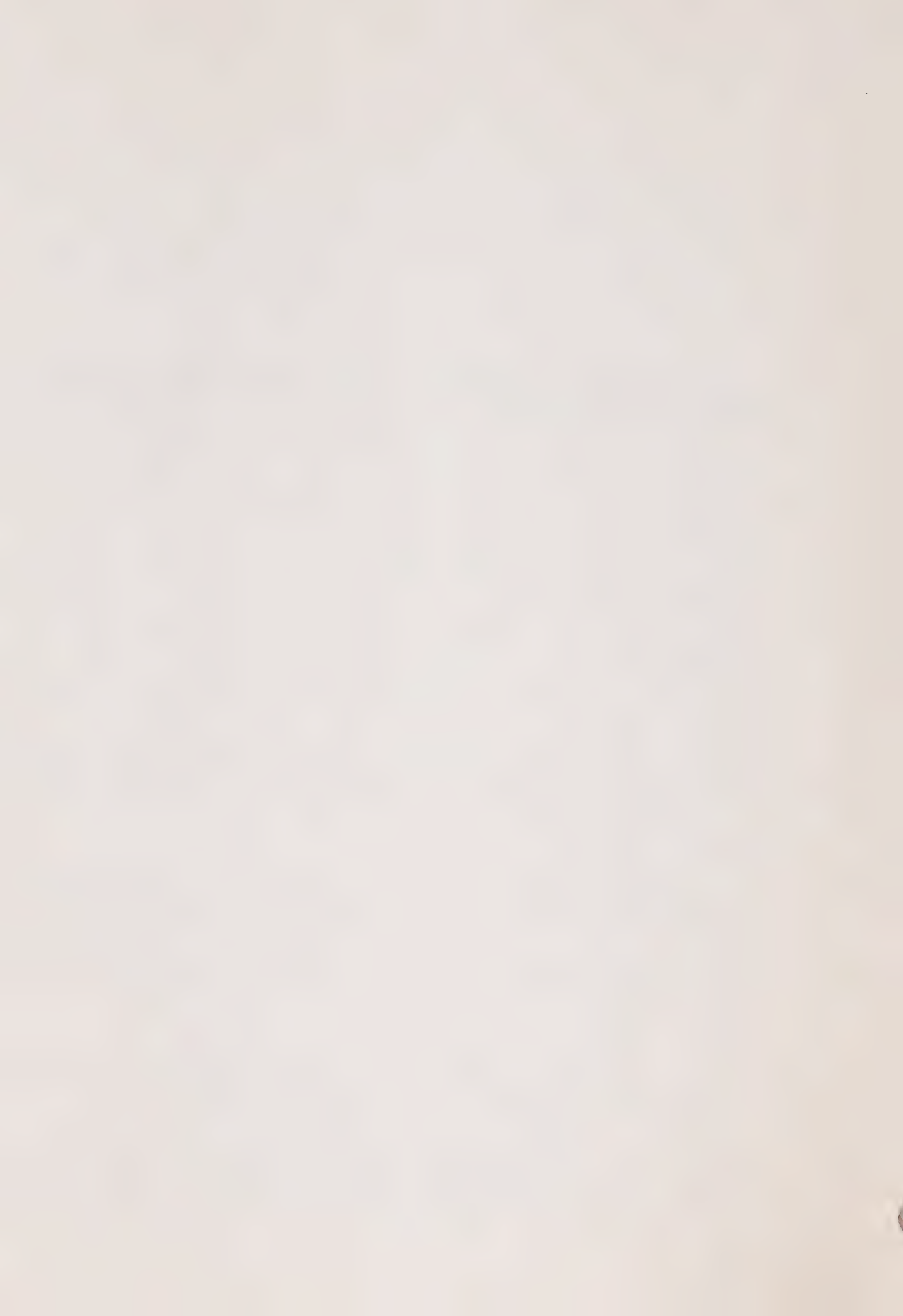
SITE #	DATE SAMPLED	Mn UG/L	Mo UG/L	Ni UG/L	Pb UG/L	Sb UG/L	Se UG/L	Sr UG/L	Ti UG/L	Tl UG/L	U UG/L	V UG/L	Zn UG/L
2	Dec 12, 1993	0.580	-	<.10<W	0.310	-	.49<T	-	-	-	-	-	4.500
3	Jan 24, 1986	-	-	-	<3.00<	-	<1.00<	-	-	-	-	-	1.000
3	Sep 17, 1987	1.000	-	<1.00<	<.003<	-	<1.00<	-	-	-	-	-	9.000
3	Dec 21, 1987	2.000	-	<1.00<	<3.00<	-	<1.00<	-	-	-	-	-	4.000
3	May 16, 1988	.49<T	-	<.10<W	.16<T	-	1.20<T	-	-	-	-	-	5.300
3	Dec 22, 1988	.18<T	-	.11<T	0.400	-	.43<T	-	-	-	-	-	16.000
3	May 23, 1990	0.940	-	<.20<W	1.000	-	<1.00<W	-	-	-	-	-	13.000
3	Jun 18, 1991	.20<T	-	<.20<W	.18<T	-	<1.00<W	-	-	-	-	-	6.700
3	Oct 08, 1991	.26<T	.11<T	<.20<W	.33<T	.33<T	1.20<T	160.000	7.300	<.05<W	1.50<T	<.05<W	13.000
3	Mar 02, 1992	.06<T	-	5.300	0.750	-	<1.00<W	-	-	-	-	-	6.100
3	May 27, 1992	1.100	-	7.600	.28<T	-	1.30<T	-	-	-	-	-	25.000
3	Jan 25, 1993	16.00<T	-	<.20<W	.24<T	-	1.20<T	-	-	-	-	-	9.600
3	Mar 18, 1993	.18<T	-	<.20<W	.28<T	-	<1.00<W	-	-	-	-	-	6.100
3	Jun 02, 1993	.11<T	-	3.900	.19<T	-	<1.00<W	-	-	-	-	-	6.000
4	Jan 29, 1986	-	-	-	6.000	-	<1.00<	-	-	-	-	-	1.000
4	Sep 17, 1987	2.000	-	<1.00<	<.003<	-	<1.00<	-	-	-	-	-	35.000
4	Dec 21, 1987	2.000	-	<1.00<	<3.00<	-	<1.00<	-	-	-	-	-	30.000
4	May 16, 1988	.20<T	-	<.10<W	.07<T	-	1.10<T	-	-	-	-	-	11.000
4	Dec 22, 1988	.17<T	-	.12<T	0.220	-	.57<T	-	-	-	-	-	6.100
4	May 23, 1990	2.800	-	<.20<W	.43<T	-	<1.00<W	-	-	-	-	-	9.100
4	Jun 18, 1991	.45<T	-	<.20<W	.20<T	-	<1.00<W	-	-	-	-	-	7.600
4	Mar 02, 1992	1.100	-	6.100	8.700	-	<1.00<W	-	-	-	-	-	12.000
4	May 27, 1992	0.630	-	7.600	.19<T	-	1.30<T	-	-	-	-	-	11.000
4	Mar 18, 1993	1.900	-	<.20<W	.18<T	-	<1.00<W	-	-	-	-	-	11.000
4	Jun 02, 1993	0.900	-	5.200	0.630	-	<1.00<W	-	-	-	-	-	9.100
5	Sep 17, 1987	39.000	-	1.000	<3.00<	-	<1.00<	-	-	-	-	-	<2.00<
5	Dec 21, 1987	15.000	-	<1.00<	<3.00<	-	<1.00<	-	-	-	-	-	1.000
5	May 16, 1988	15.000	-	.33<T	1.600	-	1.20<T	-	-	-	-	-	2.400
5	Dec 22, 1988	20.000	-	.54<T	0.660	-	<.20<W	-	-	-	-	-	3.300
5	May 23, 1990	17.000	-	<.20<W	.37<T	-	<1.00<W	-	-	-	-	-	3.000



SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	Ag UG/L	Al UG/L	As UG/L	Ba UG/L	B UG/L	Be UG/L	Cd UG/L	Cn UG/L	Co UG/L	Cr UG/L	Cu UG/L	Fe UG/L	Hg UG/L
5	Jun 18, 1991	R	B	-	1.500	<.10<W	200.000	72.000	-	.08<T	-	-	.81<T	3.30<T	38.00<T	-
5	Oct 09, 1991	R	B	<.05<W	2.600	.34<T	53.000	14.00<T	.13<T	.08<T	<1.00<W	.14<T	<.50<W	2.80<T	<6.00<W	<.02<W
5	Oct 08, 1991	T	B	<.05<W	1.400	<.1<W	170.000	62.000	<.05<W	.09<T	<1.00<W	.09<W	1.60<T	4.70<T	16.00<T	<.02<W
5	Mar 02, 1992	R	B	-	.45<T	2.000	99.000	89.000	-	.34<T	-	-	4.90<T	15.000	120.000	-
5	May 27, 1992	R	B	-	3.800	.70<T	160.000	78.000	-	<.50<W	-	-	.57<T	2.80<T	13.00<T	-
5	Mar 10, 1993	R	B	-	2.500	<.10<W	120.000	46.000	-	<.05<W	-	-	.64<T	1.40<T	120.000	-
5	Jun 02, 1993	R	B	-	2.700	.12<T	130.000	68.000	-	<.05<W	-	-	<.50<W	1.60<T	37.00<T	-
5	Jan 25, 1993	R	B	-	2.000	.55<T	200.000	100.000	-	<.05<W	-	-	5.500	3.10<T	32.00<T	-
6	Sep 17, 1987	R	B	-	130.000	<1.00<	94.000	50.00<T	-	<.30<	-	-	3.000	21.000	1.800	-
6	Dec 21, 1987	R	B	-	58.000	<1.00<	92.000	62.000	-	<.30<	-	-	3.000	2.000	710.000	-
6	May 16, 1988	R	B	-	9.800	.85<T	120.000	26.000	-	<.05<W	-	-	<.10<W	.92<T	150.000	-
6	Dec 22, 1988	R	B	-	5.600	.33<T	120.000	62.000	-	<.05<W	-	-	4.700	1.00<T	320.000	-
6	May 23, 1990	R	B	-	32.000	.77<T	120.000	140.000	-	<.05<W	-	-	4.50<T	1.00<T	380.000	-
6	Jun 18, 1991	R	B	-	1.700	.14<T	130.000	35.000	-	<.05<W	-	-	.93<T	1.30<T	120.000	-
6	Mar 02, 1992	R	B	-	.86<T	.43<T	130.000	47.000	-	.06<T	-	-	2.10<T	1.80<T	110.000	-
6	May 27, 1992	R	B	-	3.500	.81<T	120.000	30.000	-	<.50<W	-	-	<.50<W	.75<T	330.000	-
6	Jan 25, 1993	R	B	-	2.000	.53<T	150.000	51.000	-	<.05<W	-	-	1.30<T	6.200	170.000	-
6	Mar 10, 1993	R	B	-	2.500	<.2<T	140.000	43.000	-	<.05<W	-	-	.83<T	4.40<T	430.000	-
6	Jun 02, 1993	R	B	-	2.800	.22<T	110.000	42.000	-	<.05<W	-	-	<.50<W	.67<T	200.000	-
7	Sep 17, 1987	R	B	-	3.000	<1.00<	25.000	30.00<T	-	<3.00<	-	-	2.000	1.000	11.000	-
7	Dec 21, 1987	R	B	-	9.000	<1.00<	26.000	31.00<T	-	<3.00<	-	-	2.000	2.000	27.000	-
7	May 18, 1988	R	B	-	2.400	.22<T	32.000	9.80<T	-	<.05<W	-	-	.20<T	1.600	<.500<W	-
7	Dec 22, 1988	R	B	-	5.000	<.05<W	33.000	31.000	-	.06<T	-	-	2.700	4.400	68.000	-
7	Sep 20, 1989	R	B	-	6.000	.34<T	36.000	16.00<T	-	<.05<W	-	-	.73<T	2.200	6.20<T	-
7	May 23, 1990	R	B	-	13.000	1.500	36.000	63.000	-	<.05<W	-	-	3.10<T	3.40<T	40.00<T	-
7	Jan 31, 1991	R	B	<.05<W	1.900	-	36.000	-	-	<.05<W	-	.40<T	<.50<W	2.000	40.000	-
7	Jan 31, 1991	T	B	<.05<W	2.100	-	36.000	-	-	<.05<W	-	.11<T	2.4<T	5.600	7.10<T	-
7	Jun 18, 1991	R	B	-	1.600	<.10<W	34.000	9.60<T	-	<.05<W	-	-	1.80<T	2.30<T	12.00<T	-
7	Oct 08, 1991	T	B	<.05<W	2.000	<1.0<W	40.000	27.000	<.05<W	<.05<W	<1.00<W	.03<T	3.70<T	6.800	<6.00<W	<.02<W
7	Mar 02, 1992	R	B	-	.58<T	.97<T	41.000	40.000	-	.07<T	-	-	3.80<T	3.00<T	57.00<T	-



SITE #	DATE SAMPLED	Mn UG/L	Mo UG/L	Ni UG/L	Pb UG/L	Sb UG/L	Se UG/L	Sr UG/L	Ti UG/L	Ti UG/L	U UG/L	V UG/L	Zn UG/L
5	Jun 16, 1991	9.000	-	<.20<W	.38<T	-	<1.00<W	-	-	-	-	-	3.300
5	Oct 09, 1991	.18<T	1.200	1.50<T	.43<T	.33<T	<1.00<W	260.000	2.90<T	<.05<W	0.960	<.05<W	57.000
5	Oct 08, 1991	9.600	0.690	<.20<W	.17<T	.31<T	<1.00<W	250.000	10.000	<.05<W	0.720	<.05<W	1.9<T
5	Mar 02, 1992	7.500	-	7.300	1.500	-	1.20<T	-	-	-	-	-	54.000
5	May 27, 1992	12.000	-	3.300	.21<T	-	1.30<T	-	-	-	-	-	3.500
5	Mar 10, 1993	12.000	-	<.20<W	.16<T	-	<1.00<W	-	-	-	-	-	2.100
5	Jun 02, 1993	13.000	-	3.900	<.05<W	-	<1.00<W	-	-	-	-	-	1.30<T
5	Jan 25, 1993	9.000	-	<.20<W	.09<T	-	1.90<T	-	-	-	-	-	3.600
6	Sep 17, 1987	41.000	-	2.000	12.000	-	<1.00<	-	-	-	-	-	10.000
6	Dec 21, 1987	22.000	-	<1.00<	<3.00<	-	<1.00<	-	-	-	-	-	13.000
6	May 16, 1988	18.000	-	.31<T	0.360	-	.58<T	-	-	-	-	-	2.000
6	Dec 22, 1988	16.000	-	<.10<W	0.480	-	.59<T	-	-	-	-	-	1.500
6	May 23, 1990	15.000	-	<.20<W	.50<T	-	<1.00<W	-	-	-	-	-	2.100
6	Jun 18, 1991	11.000	-	<.20<W	.21<T	-	<1.00<W	-	-	-	-	-	3.700
6	Mar 02, 1992	16.000	-	4.100	.17<T	-	<1.00<W	-	-	-	-	-	3.700
6	May 27, 1992	14.000	-	.84<T	.07<T	-	<1.00<W	-	-	-	-	-	2.00<T
6	Jan 25, 1993	10.000	-	<.20<W	.14<T	-	1.30<T	-	-	-	-	-	4.000
6	Mar 10, 1993	18.000	-	<.20<W	.06<T	-	<1.00<W	-	-	-	-	-	1.70<T
6	Jun 02, 1993	14.000	-	3.000	<.05<W	-	<1.00<W	-	-	-	-	-	1.30<T
7	Sep 17, 1987	1.000	-	<1.00<	<3.00<	-	<1.00<	-	-	-	-	-	9.000
7	Dec 21, 1987	1.000	-	1.000	<3.00<	-	<1.00<	-	-	-	-	-	16.000
7	May 18, 1988	.16<T	-	.33<T	.08<T	-	<.20<W	-	-	-	-	-	6.500
7	Dec 22, 1988	2.200	-	.17<T	0.400	-	<.20<W	-	-	-	-	-	39.000
7	Sep 20, 1989	.28<T	-	<.10<W	<.10<W	-	<1.00<W	-	-	-	-	-	16.000
7	May 23, 1990	.39<T	-	.33<T	.28<T	-	<1.00<W	-	-	-	-	-	19.000
7	Jan 31, 1991	.16<T	-	<.20<W	.16<T	-	<1.00<W	-	-	-	-	-	24.000
7	Jan 31, 1991	.23<T	-	<.20<W	.37<T	-	<1.00<W	-	-	-	-	-	44.000
7	Jun 18, 1991	.14<T	-	<.20<W	.11<T	-	<1.00<W	-	-	-	-	-	12.000
7	Oct 08, 1991	.07<T	.26<T	<.20<W	.29<T	.31<T	<1.00<W	110.000	6.100	<.05<W	.20<T	<.05<W	6.600
7	Mar 02, 1992	2.600	-	4.900	.30<T	-	<1.00<W	-	-	-	-	-	12.000



SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	Ag UG/L	Al UG/L	As UG/L	Ba UG/L	B UG/L	Be UG/L	Cd UG/L	Cn UG/L	Co UG/L	Cr UG/L	Cu UG/L	Fe UG/L	Hg UG/L
7	May 27, 1992	R	B	-	3.100	.39<T	33.000	11.00<T	-	<.05<W	-	-	<.50<W	2.90<T	6.40<T	-
7	Jan 25, 1993	R	B	-	2.200	<.10<W	33.000	17.00<T	-	<.05<W	-	-	1.00<T	1.30<T	10.00<T	-
7	Mar 10, 1993	R	B	-	2.900	<.10<W	38.000	16.00<T	-	<.05<W	-	-	1.00<T	1.80<T	17.00<T	-
7	Jun 02, 1993	R	B	-	3.100	<.10<W	34.000	11.00<T	-	<.05<W	-	-	<.50<W	1.30<T	<6.00<W	-
8	Dec 22, 1988	R	B	-	2.400	<.05<W	34.000	42.000	-	<.05<W	-	-	4.100	5.000	22.00<T	-
8	Sep 20, 1989	R	B	-	13.000	.39<T	36.000	14.00<T	-	<.05<W	-	-	.54<T	3.400	84.000	-
8	Jan 31, 1991	R	B	<.05<W	2.600	-	36.000	-	-	<.05<W	-	-	1.80<T	2.30<T	11.00<T	-
8	Jan 31, 1991	T	B	<.05<W	3.800	-	36.000	-	-	.08<T	-	-	<.50<W	56.000	16.00<T	-
8	Jun 18, 1991	R	B	-	36.000	<.10<W	37.000	8.50<T	-	<.05<W	-	-	<.50<W	10.000	120.000	-
8	Mar 02, 1992	R	B	-	3.400	.19<T	36.000	10.00<T	-	<.05<W	-	-	<.50<W	3.10<T	65.000	-
8	May 27, 1992	R	B	-	3.000	<.10<W	34.000	11.00<T	-	<.05<W	-	-	<.50<W	2.40<T	15.00<T	-
9	Jun 22, 1992	R	B	-	9.000	-	-	-	-	0.200	-	1.100	-	34.100	1.600	-
9	Nov 02, 1992	R	B	-	12.000	-	-	-	-	0.200	-	1.100	-	20.000	52.100	-
8	Jan 25, 1993	R	B	-	5.500	<.10<W	33.000	20.00<T	-	<.05<W	-	-	2.80<T	3.90<T	32.00<T	-
8	Mar 10, 1993	R	B	-	6.100	<.10<W	38.000	18.00<T	-	<.05<W	-	-	1.00<T	3.40<T	29.00<T	-
8	Jun 02, 1993	R	B	-	10.000	<.10<W	33.000	12.00<T	-	<.05<W	-	-	<.50<W	3.30<T	43.00<T	-
10	Nov 26, 1990	R	B	-	11.000	-	-	-	-	0.200	-	7.900	-	15.300	86.700	-
10	Dec 04, 1990	R	B	-	10.000	-	-	-	-	0.200	-	5.200	-	7.600	198.000	-
10	Apr 15, 1991	R	B	-	23.000	-	-	-	-	0.300	-	1.200	-	6.800	240.000	-
10	Jul 02, 1991	R	B	-	16.000	-	-	-	-	0.200	-	1.100	-	5.000	138.000	-
10	Apr 27, 1992	R	B	-	10.000	-	-	-	-	0.200	-	1.100	-	12.500	238.000	-
10	Jun 08, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	151.000	-
10	Jun 22, 1992	R	B	-	7.000	-	-	-	-	0.200	-	1.500	-	9.600	148.000	-
10	Jul 13, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	133.000	-
10	Aug 30, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	140.000	-
10	Oct 26, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	145.000	-
10	Nov 16, 1992	R	B	-	-	-	-	-	-	-	-	-	-	-	146.000	-
10	Nov 02, 1992	R	B	-	10.000	-	-	-	-	0.200	-	1.100	-	9.800	128.000	-
11	Nov 26, 1990	R	B	-	10.000	-	-	-	-	0.200	-	7.100	-	5.800	225.000	-
11	Dec 04, 1990	R	B	-	10.000	-	-	-	-	0.200	-	9.300	-	8.100	799.000	-

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	Ag UG/L	Al UG/L	As UG/L	Ba UG/L	B UG/L	Be UG/L	Cd UG/L	Cn UG/L	Co UG/L	Cr UG/L	Cu UG/L	Fe UG/L	Hg UG/L
11	Apr 15, 1991	R	B	-	7.000	-	-	-	-	0.300	-	1.500	-	7.100	316.000	-
11	Apr 15, 1991	R	B	-	24.000	-	-	-	-	0.200	-	1.100	-	4.600	234.000	-
11	Apr 27, 1992	R	B	-	11.000	-	-	-	-	0.200	-	1.100	-	2.800	398.000	-
11	Jun 22, 1992	R	B	-	5.000	-	-	-	-	0.200	-	1.800	-	16.100	83.500	-
11	Nov-02, 1992	R	B	-	10.000	-	-	-	-	0.200	-	1.100	-	14.600	69.100	-
12	Nov 26, 1990	R	B	-	12.000	-	-	-	-	0.200	-	7.000	-	9.800	145.000	-
12	Dec 04, 1990	R	B	-	10.000	-	-	-	-	0.200	-	6.900	-	9.000	274.000	-
12	Apr 15, 1991	R	B	-	7.000	-	-	-	-	0.300	-	2.000	-	4.800	236.000	-
12	Jul 15, 1991	R	B	-	32.000	-	-	-	-	0.200	-	1.100	-	4.700	148.000	-
12	Jun 22, 1992	R	B	-	6.000	-	-	-	-	0.200	-	1.700	-	31.700	176.000	-
12	Apr 27, 1992	R	B	-	12.000	-	-	-	-	0.200	-	1.100	-	4.000	192.000	-
12	Nov-02, 1992	R	B	-	10.000	-	-	-	-	0.200	-	1.100	-	4.000	121.000	-
13	Jun 18, 1990	R	B	-	32.000	-	-	-	-	0.200	-	17.100	-	5.300	248.000	-
13	Nov 19, 1990	R	B	-	10.000	-	-	-	-	0.200	-	9.200	-	17.200	58.700	-
13	Nov 26, 1990	R	B	-	16.000	-	-	-	-	0.200	-	7.400	-	11.200	230.000	-
13	Dec 04, 1990	R	B	-	10.000	-	-	-	-	0.200	-	5.900	-	8.300	780.000	-
14	Feb 07, 1991	R	B	-	17.000	-	-	-	-	0.200	-	1.100	-	17.400	126.000	-
14	Apr 27, 1992	R	B	-	10.000	-	-	-	-	0.200	-	1.100	-	39.300	155.000	-
14	Jun 22, 1992	R	B	-	5.000	-	-	-	-	0.200	-	2.100	-	15.100	60.300	-
14	Nov-02, 1992	R	B	-	12.000	-	-	-	-	0.200	-	1.100	-	15.100	77.000	-
15	Nov 26, 1990	R	B	-	19.000	-	-	-	-	0.200	-	6.600	-	9.300	3.300	-
15	Dec 04, 1990	R	B	-	10.000	-	-	-	-	0.200	-	5.000	-	3.300	5.400	-
15	Feb 07, 1991	R	B	-	3.500	-	-	-	-	0.200	-	1.100	-	1.900	3.500	-
15	Apr 15, 1991	R	B	-	9.600	-	-	-	-	0.300	-	1.600	-	1.400	9.600	-
15	Apr 27, 1992	R	B	-	10.000	-	-	-	-	0.200	-	1.100	-	1.700	4.700	-
15	Jun 22, 1992	R	B	-	5.000	-	-	-	-	0.200	-	0.700	-	2.200	1.400	-
15	Nov-02, 1992	R	B	-	10.000	-	-	-	-	0.200	-	1.100	-	22.000	13.300	-
17	Mar 05, 1991	R	B	-	-	-	-	-	-	-	-	-	-	<10.00	<20.00	-
17	Mar 19, 1992	R	B	<10.00	<25.00	-	73.000	-	<3.00	<3.00	-	11.000	-	<5.00	<3.00	<5.00
18	May 03, 1993	R	B	<.05 <W	1.400	.30 <T	66.000	24.000	<.05 <W	<.05 <W	-	29 <T	8.200	.56 <T	<6.00 <W	<.02 <W

SITE #	DATE SAMPLED	Mn UG/L	Mo UG/L	Ni UG/L	Pb UG/L	Sb UG/L	Se UG/L	Sr UG/L	Ti UG/L	Tl UG/L	U UG/L	V UG/L	Zn UG/L
11	Apr 15, 1991	111.000	-	13.000	3.100	-	-	-	-	-	-	-	0.600
11	Apr 15, 1991	94.500	-	30.000	1.900	-	-	-	-	-	-	-	20.000
11	Apr 27, 1992	135.000	-	4.000	0.400	-	-	-	-	-	-	-	87.200
11	Jun 22, 1992	111.000	-	4.000	2.300	-	-	-	-	-	-	-	20.000
11	Nov 02, 1992	126.000	-	4.000	1.400	-	-	-	-	-	-	-	14.700
12	Nov 26, 1990	6.500	-	14.000	1.000	-	-	-	-	-	-	-	2.000
12	Dec 04, 1990	61.300	-	30.000	5.600	-	-	-	-	-	-	-	2.400
12	Apr 15, 1991	77.500	-	12.000	3.700	-	-	-	-	-	-	-	1.100
12	Jul 15, 1991	56.100	-	25.000	1.000	-	-	-	-	-	-	-	20.000
12	Jun 22, 1992	82.300	-	4.000	1.300	-	-	-	-	-	-	-	20.000
12	Apr 27, 1992	85.200	-	4.000	1.500	-	-	-	-	-	-	-	1.400
12	Nov 02, 1992	64.900	-	4.000	0.400	-	-	-	-	-	-	-	4.900
13	Jun 18, 1990	111.000	-	43.000	4.600	-	-	-	-	-	-	-	1.100
13	Nov 19, 1990	0.500	-	21.000	1.000	-	-	-	-	-	-	-	30.000
13	Nov 26, 1990	0.500	-	15.000	1.000	-	-	-	-	-	-	-	0.400
13	Dec 04, 1990	172.000	-	32.000	4.900	-	-	-	-	-	-	-	0.800
14	Feb 07, 1991	93.200	-	36.000	12.000	-	-	-	-	-	-	-	20.000
14	Apr 27, 1992	125.000	-	4.000	7.800	-	-	-	-	-	-	-	64.100
14	Jun 22, 1992	102.000	-	4.000	1.300	-	-	-	-	-	-	-	20.000
14	Nov 02, 1992	120.000	-	4.000	1.400	-	-	-	-	-	-	-	13.300
15	Nov 26, 1990	0.500	-	15.000	1.000	-	-	-	-	-	-	-	1.900
15	Dec 04, 1990	1.000	-	31.000	4.000	-	-	-	-	-	-	-	2.500
15	Feb 07, 1991	0.500	-	20.000	1.500	-	-	-	-	-	-	-	20.000
15	Apr 15, 1991	0.600	-	10.000	30.000	-	-	-	-	-	-	-	0.600
15	Apr 27, 1992	0.500	-	4.000	1.600	-	-	-	-	-	-	-	1.000
15	Jun 22, 1992	0.500	-	4.000	0.400	-	-	-	-	-	-	-	20.000
15	Nov 02, 1992	0.500	-	4.000	0.900	-	-	-	-	-	-	-	1.900
17	Mar 05, 1991	<10.00	-	-	-	-	-	-	-	-	-	-	10.000
17	Mar 19, 1992	<1.00	7.000	<6.00	<10.00	-	-	186.000	<3.00	-	<2.00	<3.00	4.000
18	May 03, 1993	.11<T	.34<T	<20<W	.07<T	0.540	<1.00<W	160.000	11.000	.05<W	.4<T	<.05<W	8.500

SITE #	DATE SAMPLED	SAMPLE TYPE	REPORT TYPE	Ag UG/L	Al UG/L	As UG/L	Ba UG/L	B UG/L	Be UG/L	Cd UG/L	Cn UG/L	Co UG/L	Cr UG/L	Cu UG/L	Fe UG/L	Hg UG/L
19	Sep 1988	R	B	<10.00	-	5.000	100.000	<200.00	-	10.000	<10.00	-	<100	-	-	<1.00
20	Nov 1988	R	B	<1.00	-	9.000	130.000	3900.000	-	<1.00	<20.00	-	<10.00	3.000	48.000	-
91	Dec 1990	R	B	<10.00	<25.00	-	700.000	-	<3.00	4.000	-	<5.00	-	8.000	8.000	-
91	Mar 1992	R	B	<10.00	34.000	-	55.000	-	<3.00	<3.00	-	<5.00	-	<3.00	47.000	-
92	Dec 1990	R	B	<10.00	<25.00	-	467.000	-	<3.00	6.000	-	15.000	-	18.000	199.000	-
92	Mar 1992	R	B	<10.00	<25.00	-	521.000	-	<3.00	<3.00	-	17.000	-	<3.00	2350.000	-
93	Dec 1990	R	B	<10.00	34.000	-	69.000	-	<3.00	<3.00	-	<5.00	-	<3.00	58.000	-

SITE #	DATE SAMPLED	Mn UG/L	Mo UG/L	Ni UG/L	Pb UG/L	Sb UG/L	Se UG/L	Sr UG/L	Ti UG/L	Tl UG/L	U UG/L	V UG/L	Zn UG/L
19	Sep 1988	-	-	<40.00	<100.00	-	<2.00	-	-	-	-	-	-
20	Nov 1988	8.000	-	-	<10.00	-	<2.00	-	-	-	<1.00	-	4.000
91	Dec 1990	72.000	<6.00	<10.00	<10.00	-	-	313.000	<3.00	-	-	<3.00	19.000
91	Mar 1992	7.000	<6.00	<10.00	17.000	-	-	220.000	<3.00	-	-	<3.00	12.000
92	Dec 1990	441.000	7.000	35.000	23.000	-	-	1630.000	<3.00	-	-	8.000	16.000
92	Mar 1992	124.000	<6.00	24.000	17.000	-	-	1960.000	<3.00	-	-	9.000	24.000
93	Dec 1990	167.000	<6.00	<10.00	13.000	-	-	317.000	<3.00	-	-	<3.00	160.000

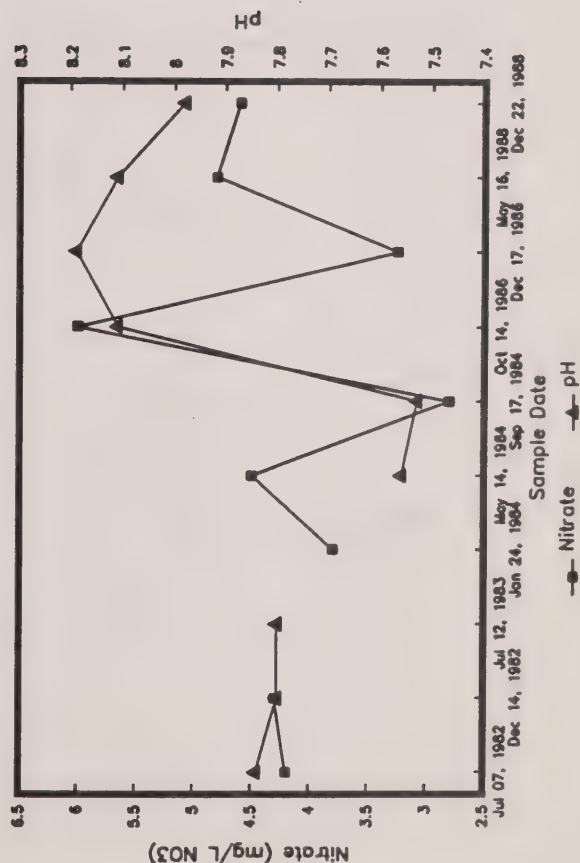
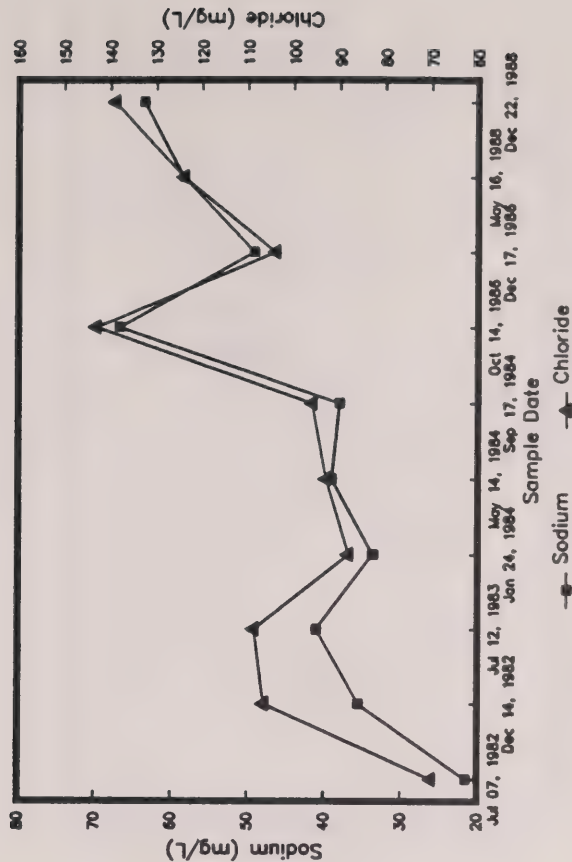
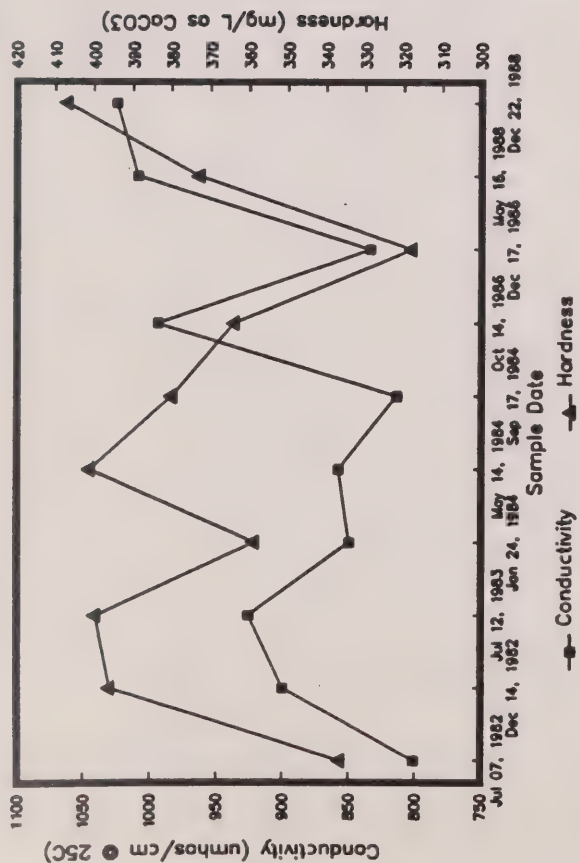
APPENDIX VI

WATER QUALITY TRENDS IN GROUNDWATER

(BEDROCK WELLS)

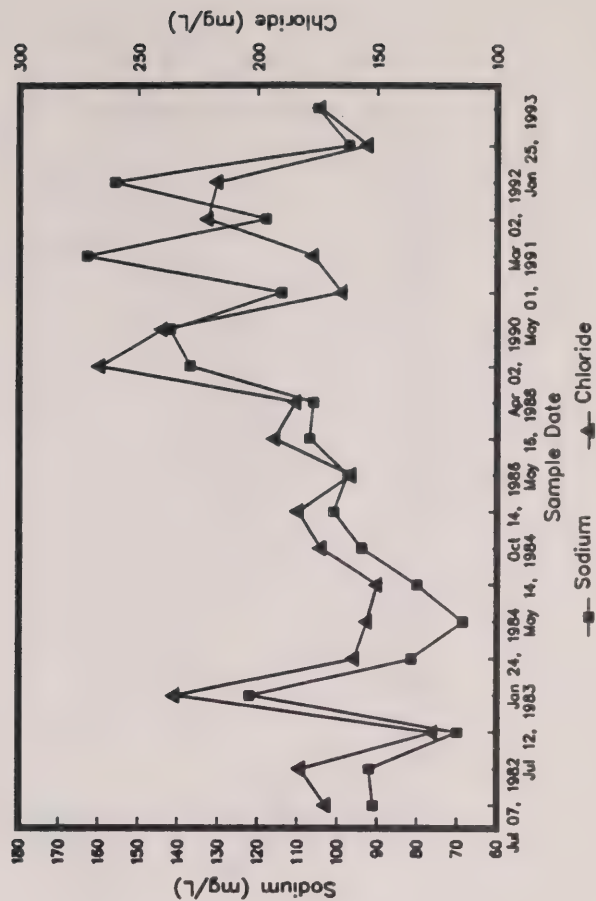
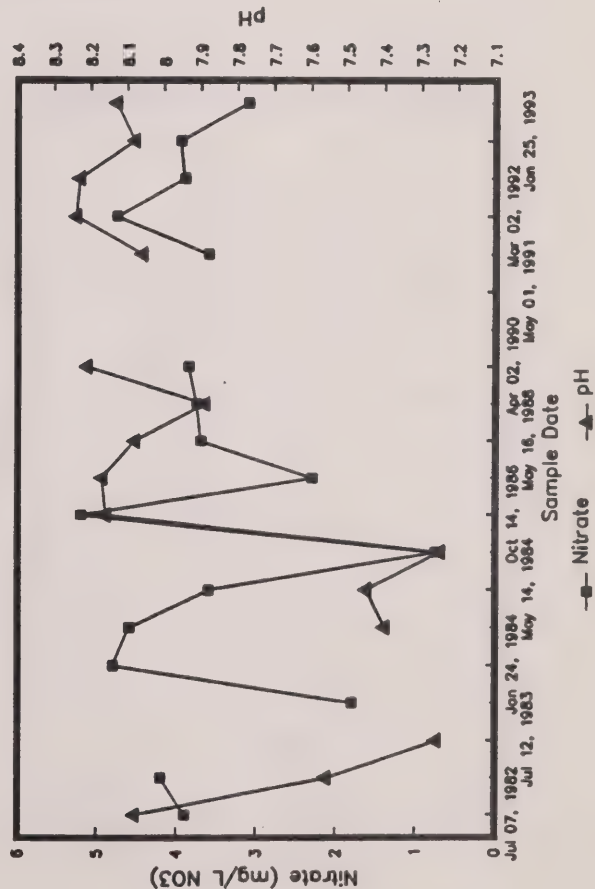
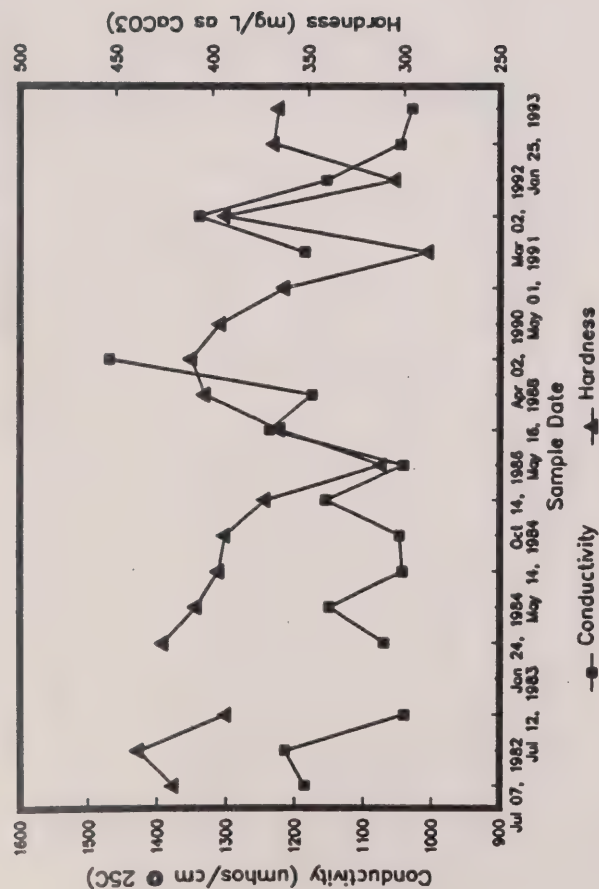
Town of Caledon Municipal Well # 1

WATER QUALITY TRENDS 1982 - 1988



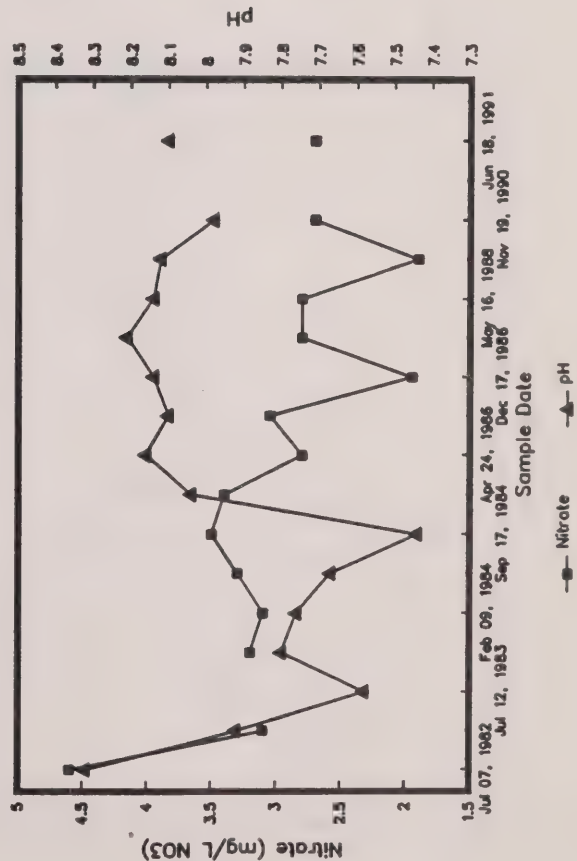
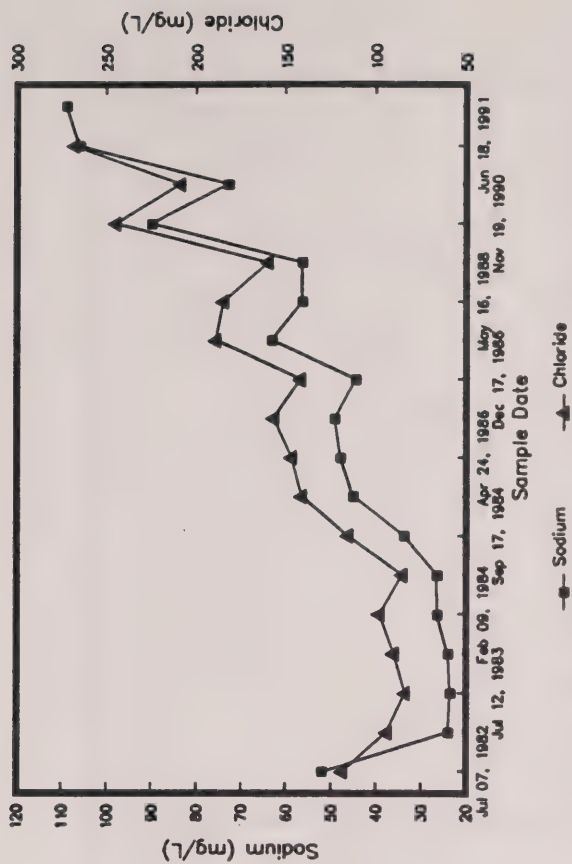
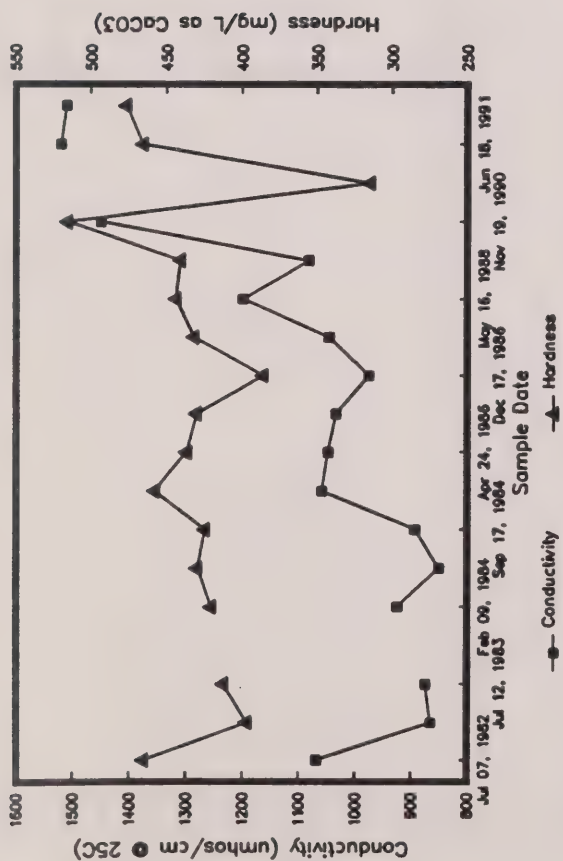
Town of Caledon Municipal Well # 2

WATER QUALITY TRENDS 1982 - 1993



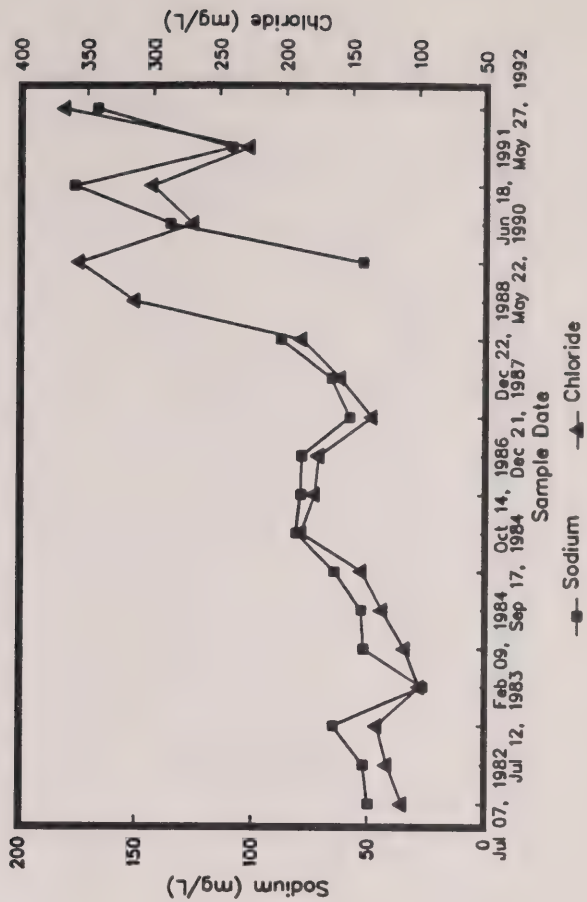
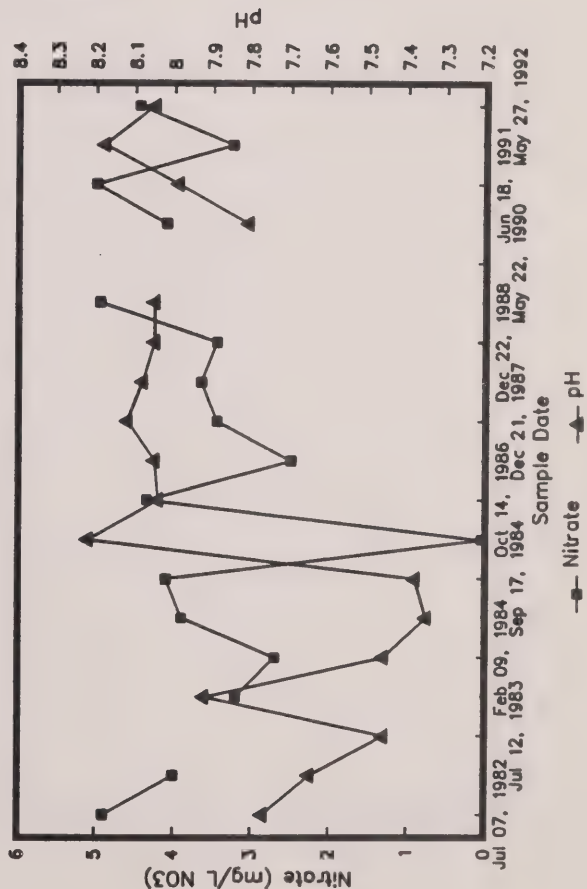
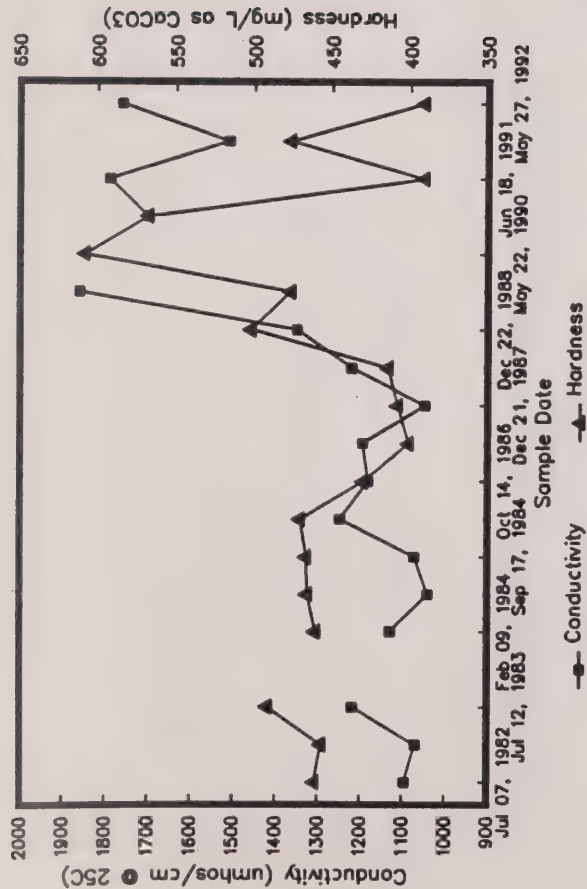
McLeodville Municipal Well # 1

WATER QUALITY TRENDS 1982 - 1991



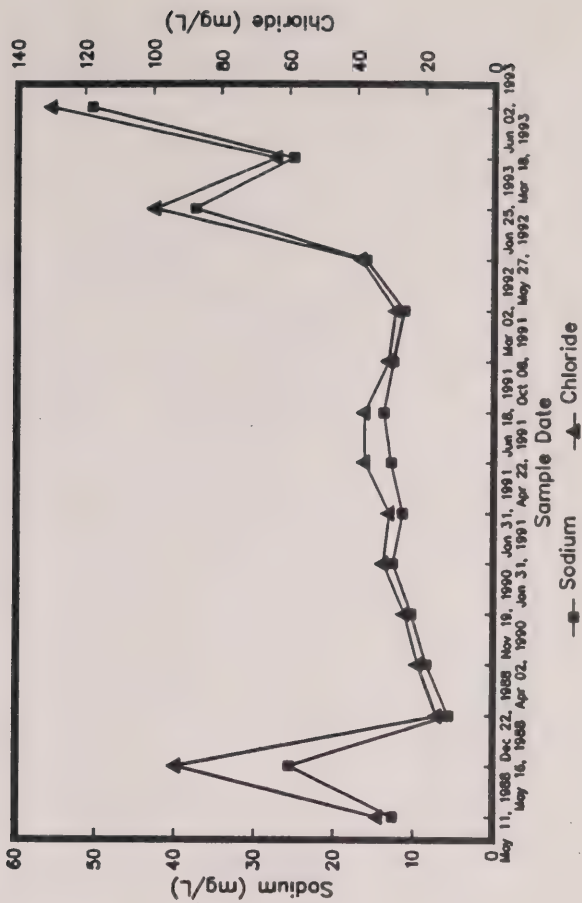
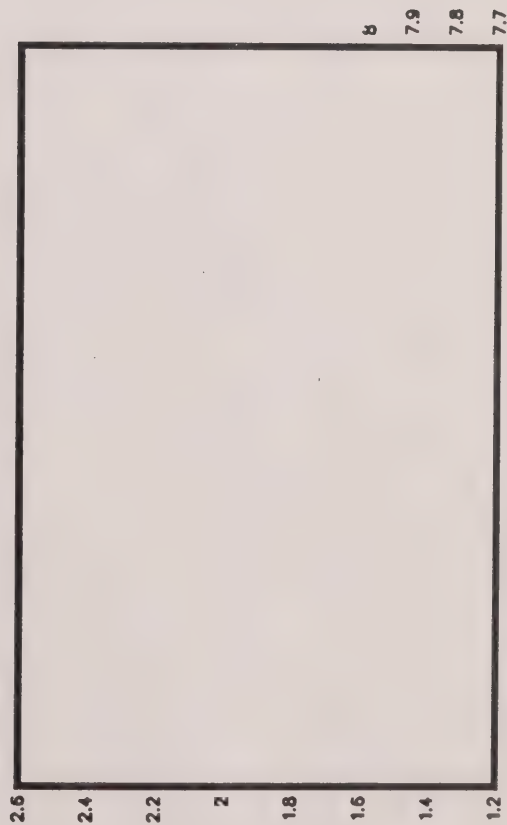
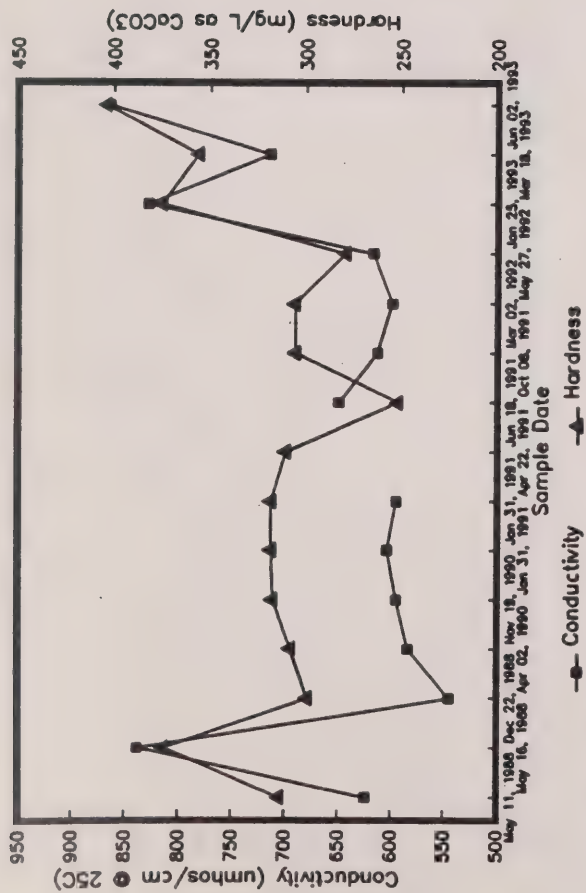
McLeodville Municipal Well # 2

WATER QUALITY TRENDS 1982 - 1992



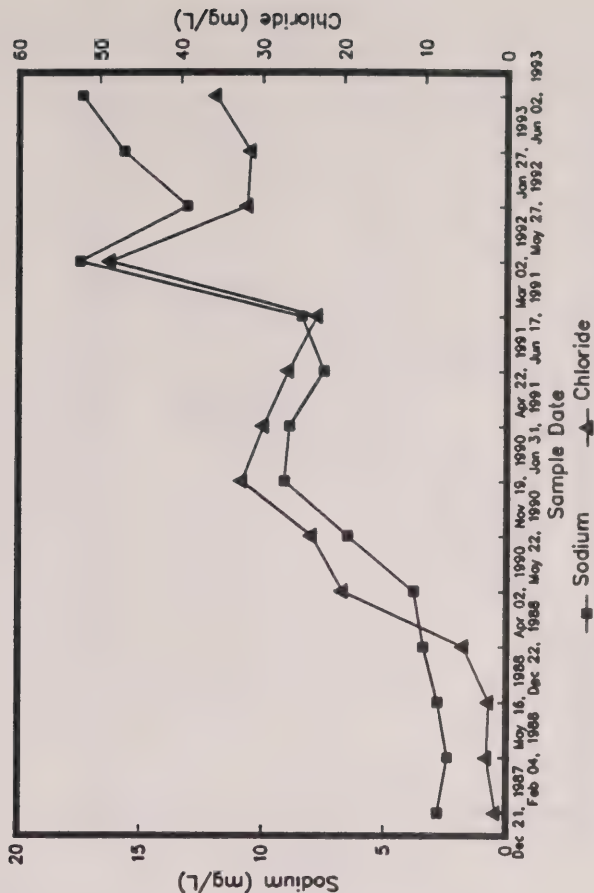
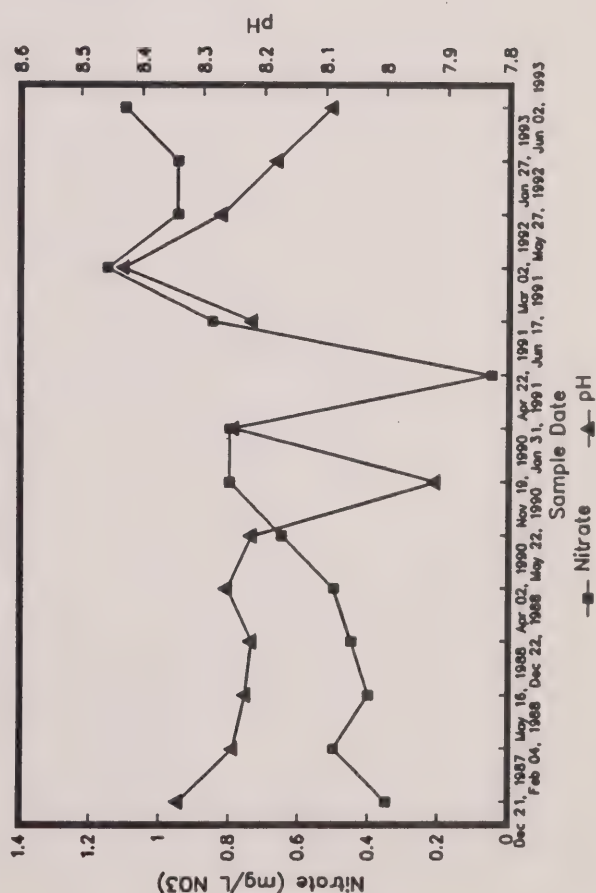
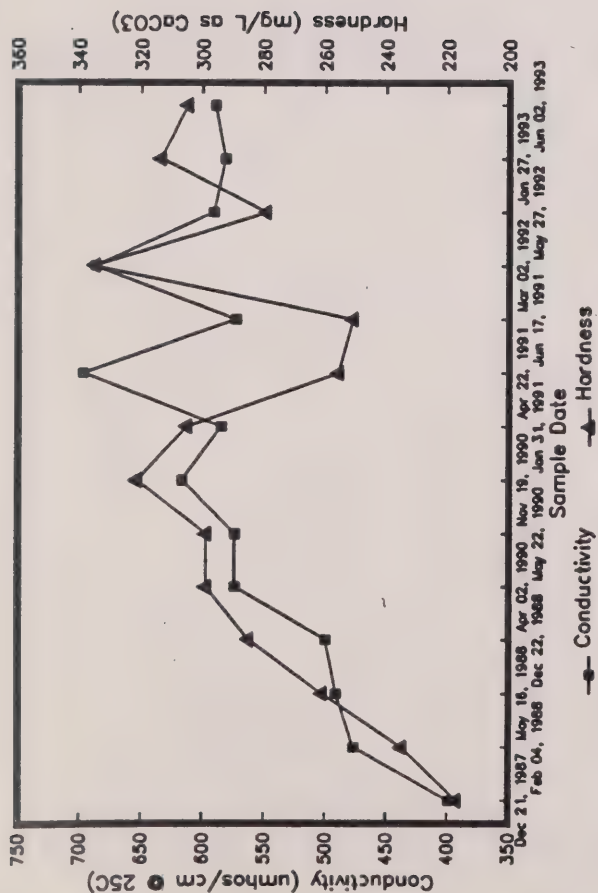
McLeodville Municipal Well # 3

WATER QUALITY TRENDS 1988 - 1993



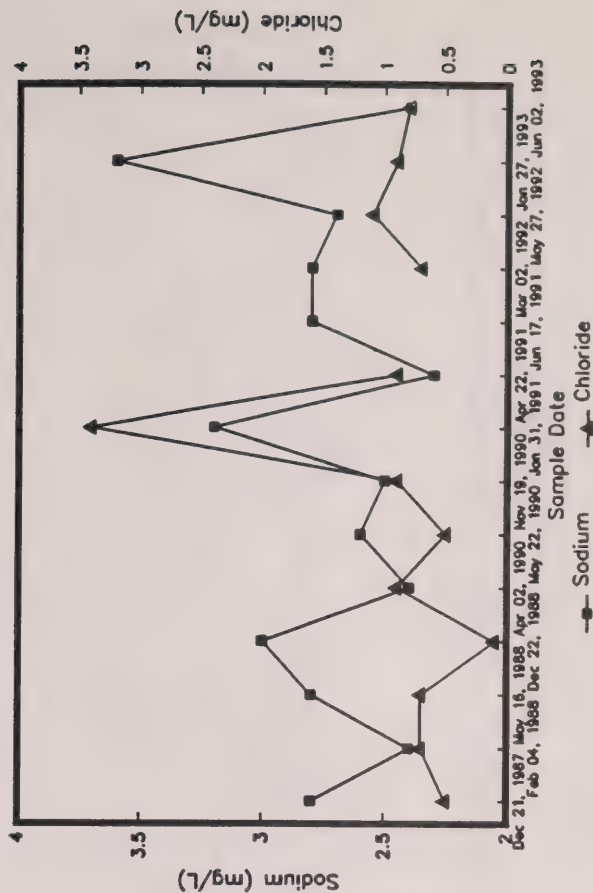
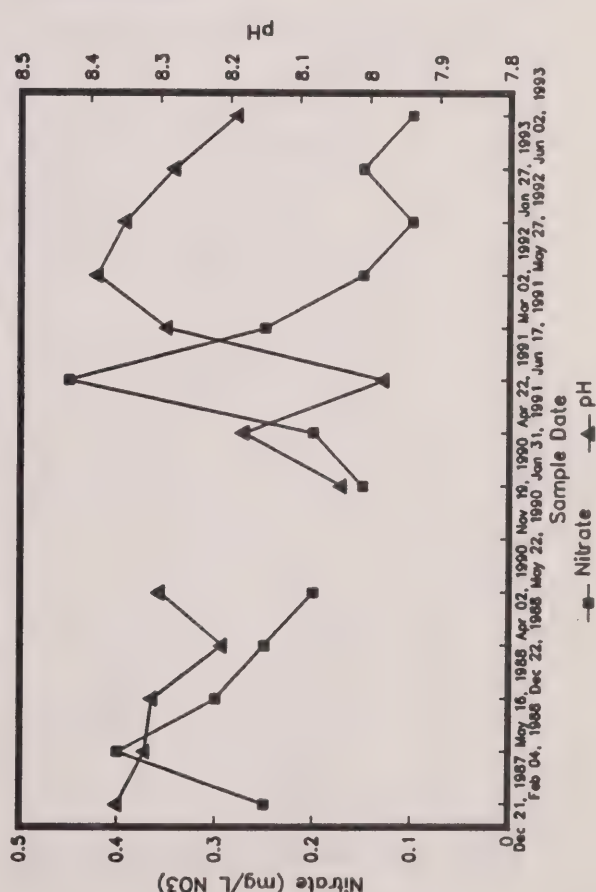
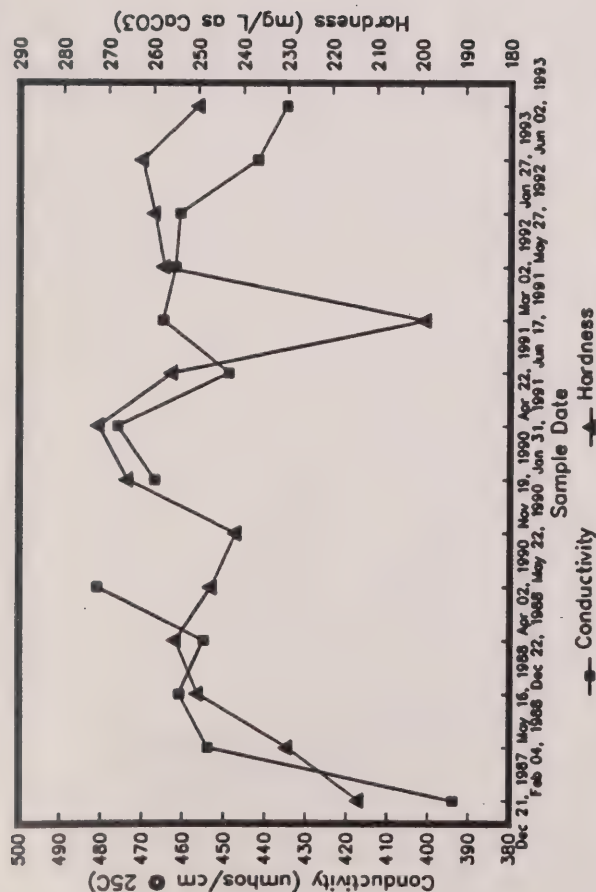
Skywood Park Municipal Well # 1

WATER QUALITY TRENDS 1987 - 1993



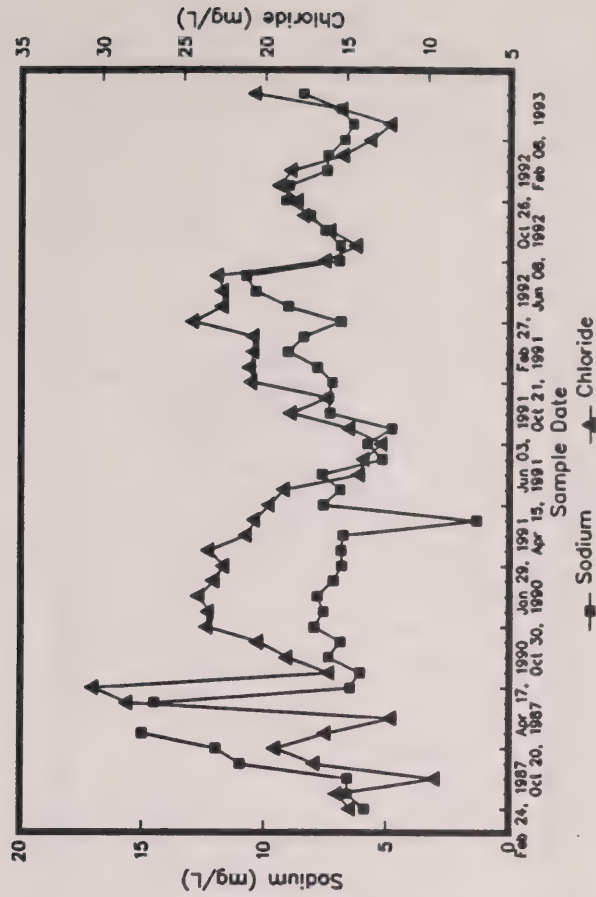
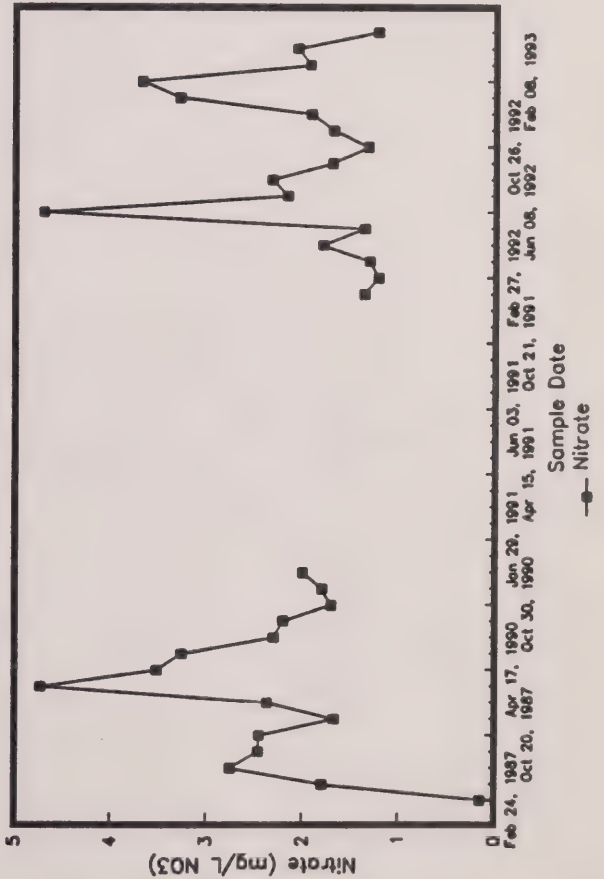
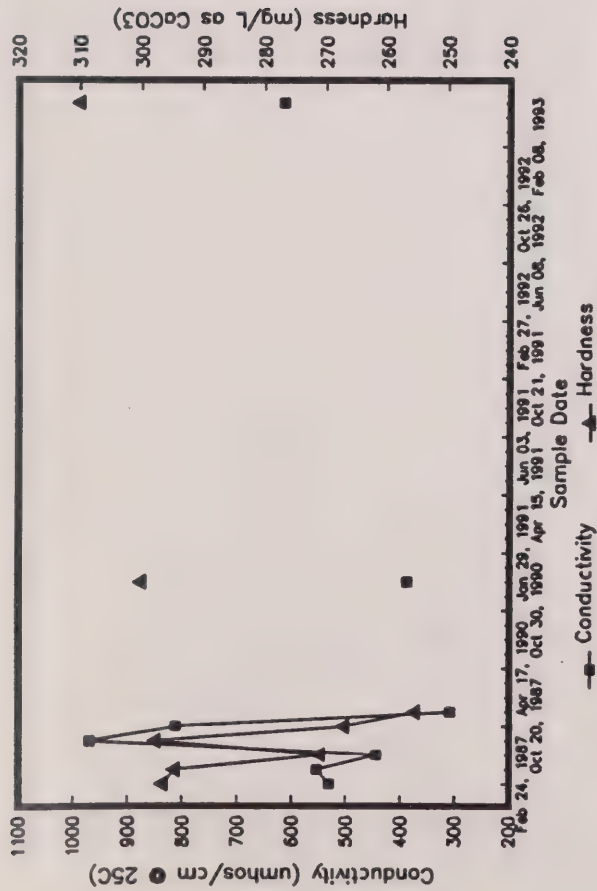
Skywood Park Municipal Well # 2

WATER QUALITY TRENDS 1987 - 1993



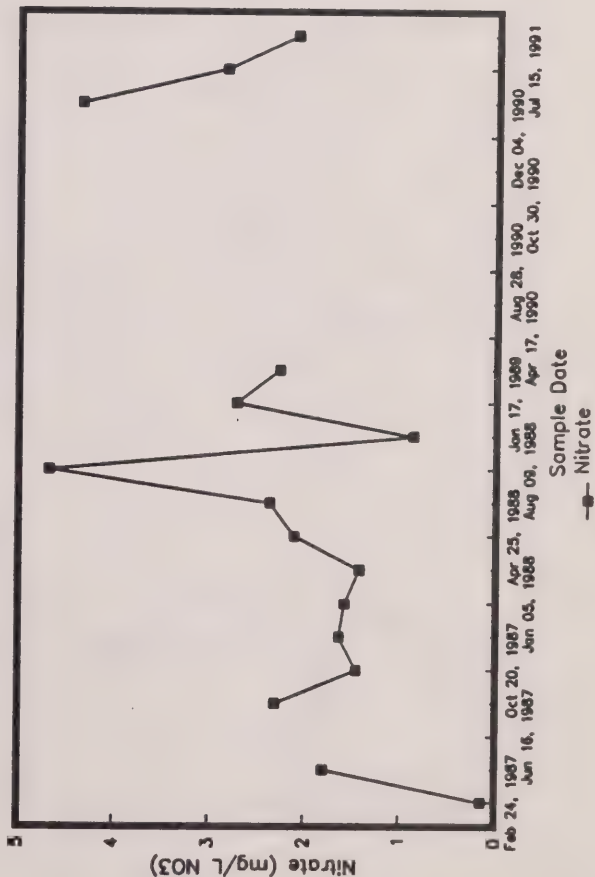
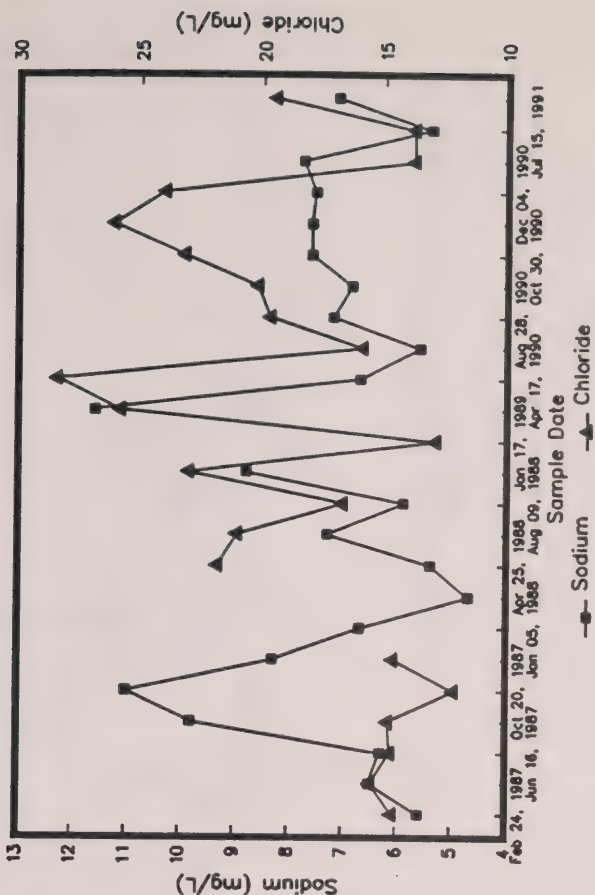
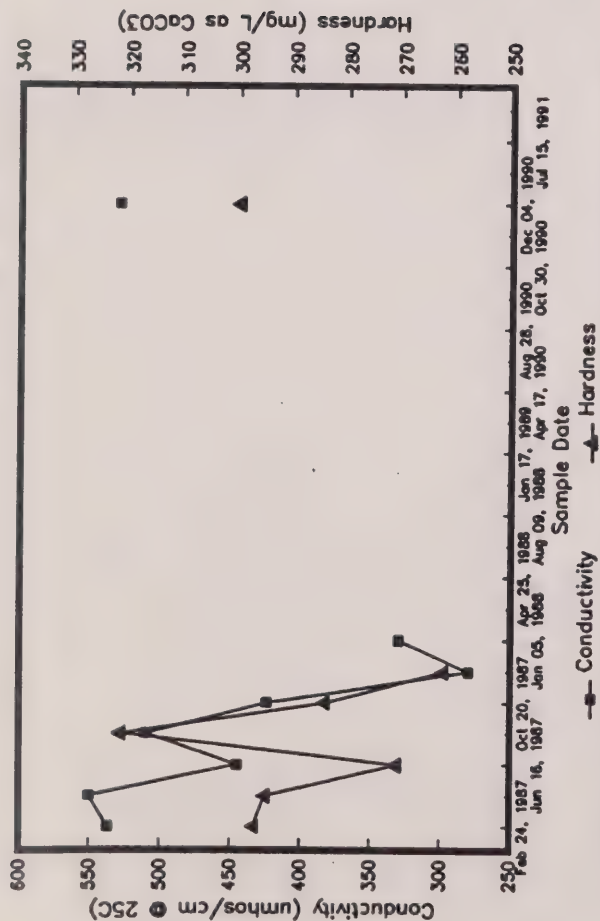
Town of Acton Municipal Well, Davidson # 1

WATER QUALITY TRENDS 1987 - 1993



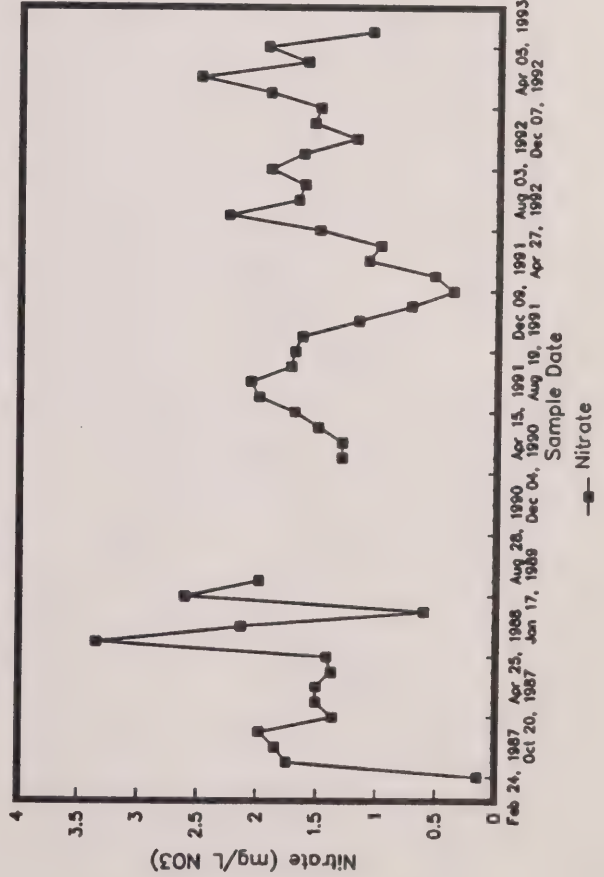
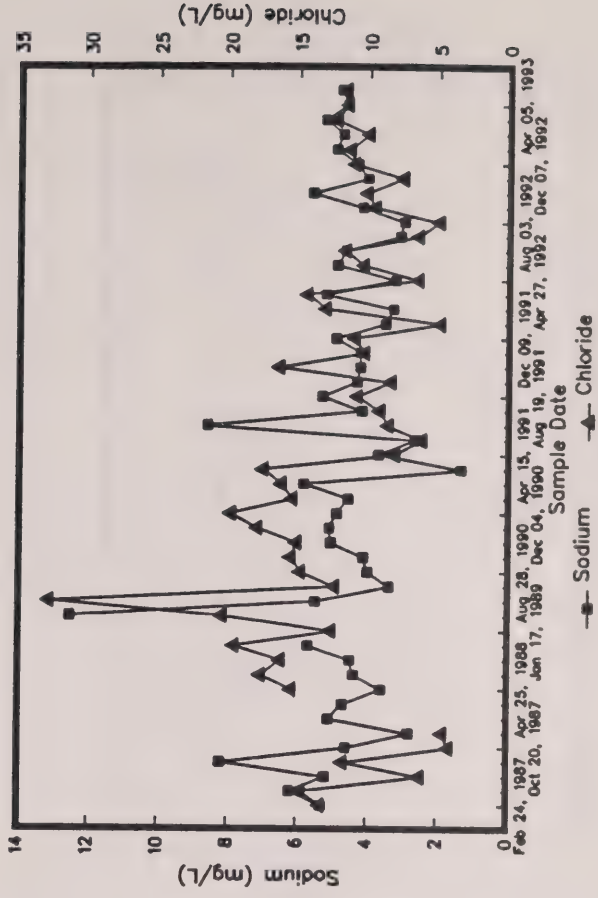
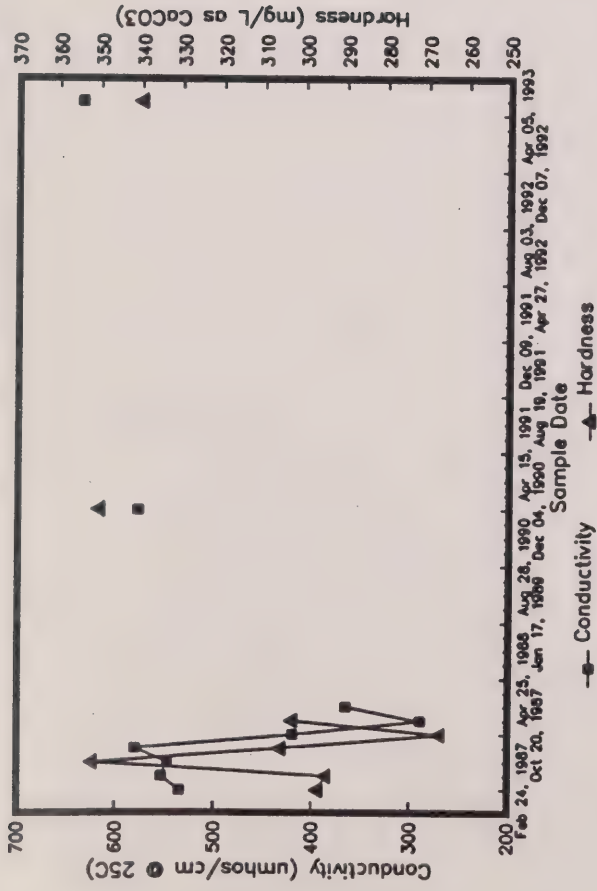
Town of Acton Municipal Well, Davidson # 2

WATER QUALITY TRENDS 1987 - 1991



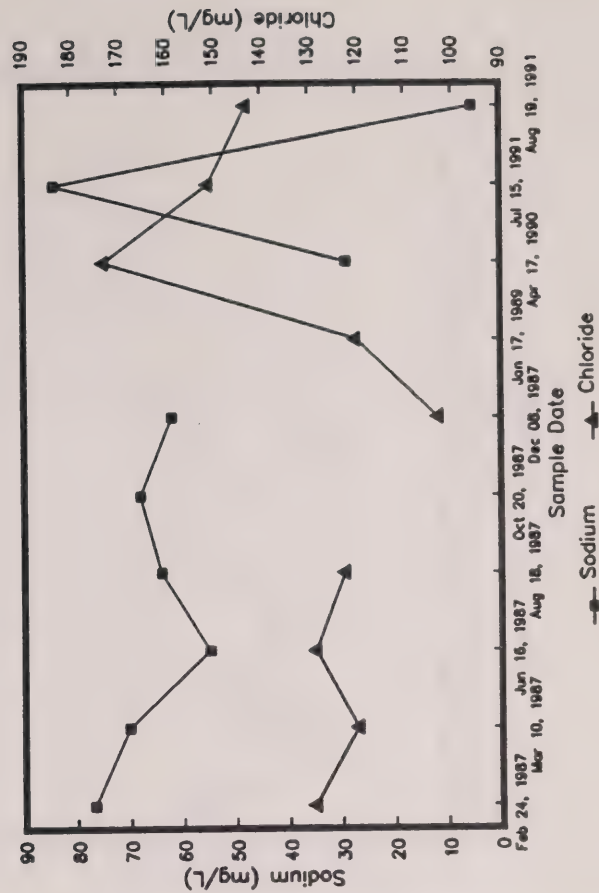
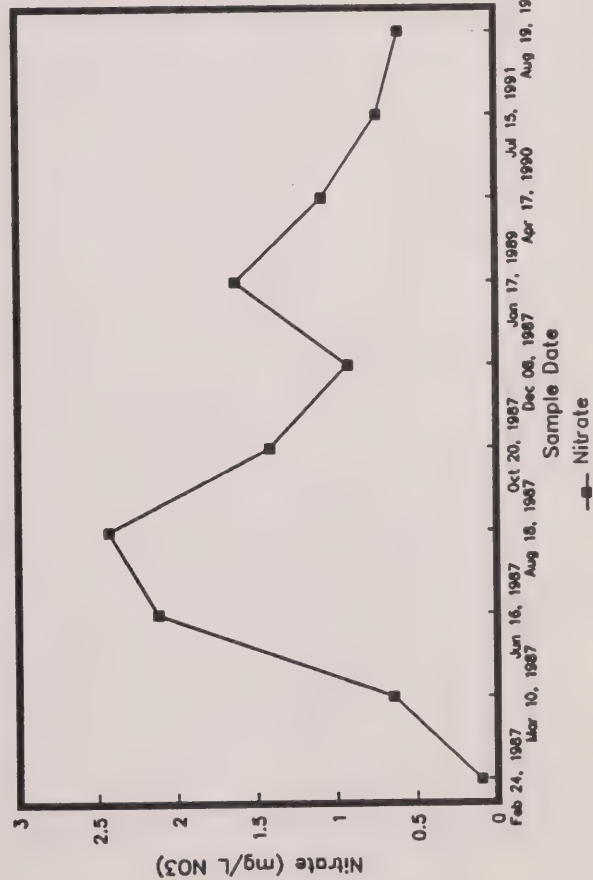
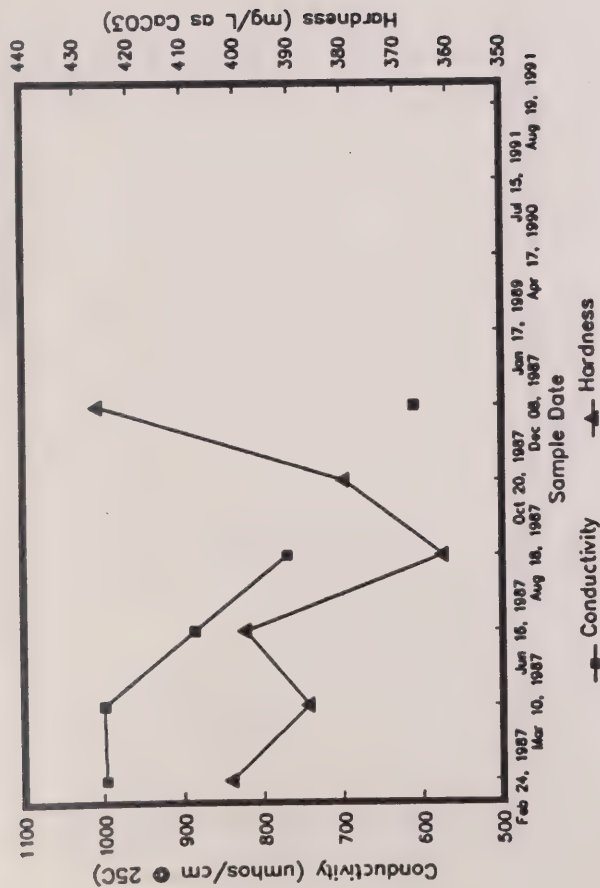
Town of Acton Municipal Well, 4th Line

WATER QUALITY TRENDS 1987 - 1993

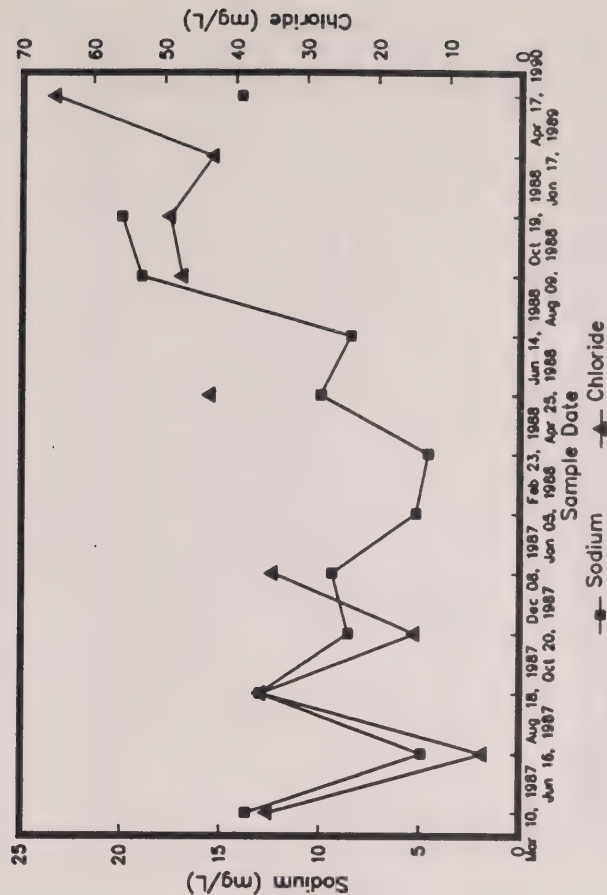
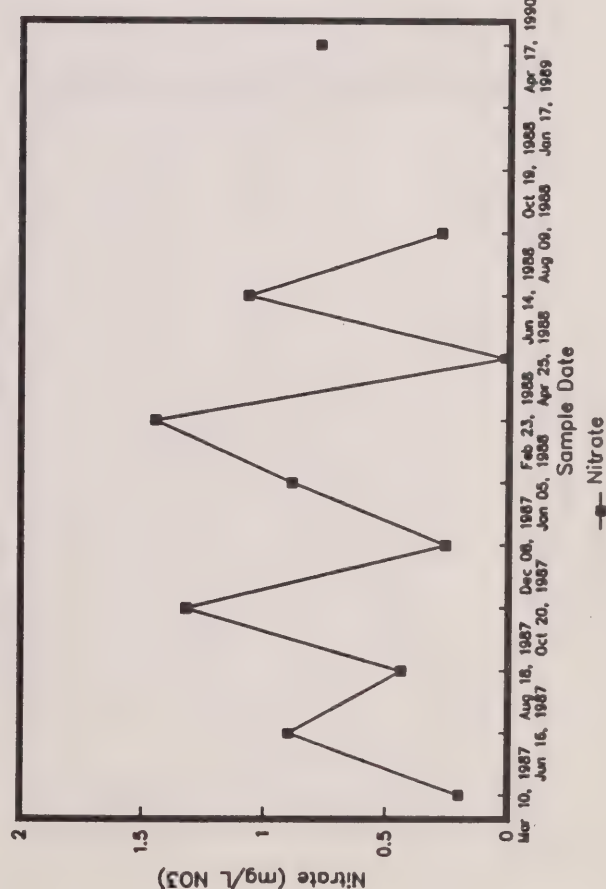
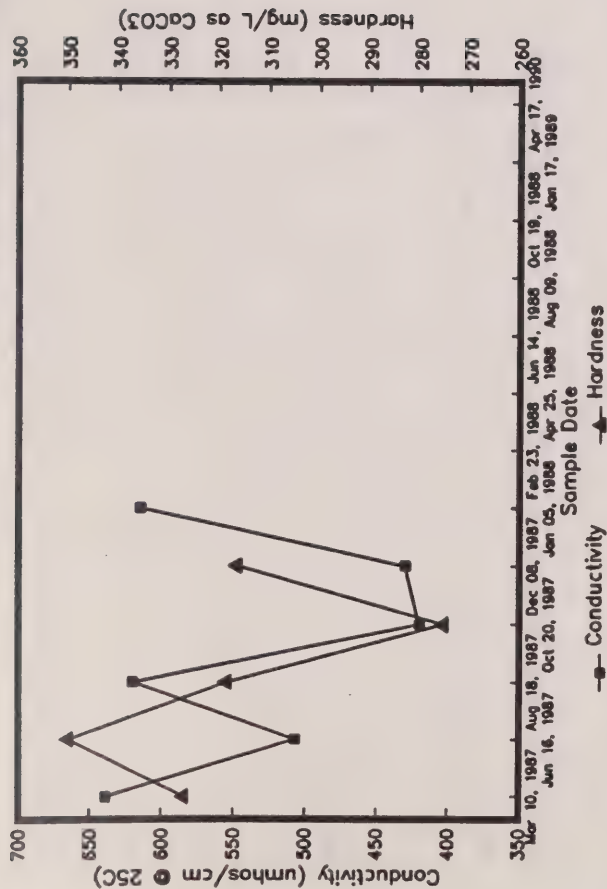


Town of Acton Municipal Well, 2nd Line

WATER QUALITY TRENDS 1987 - 1991

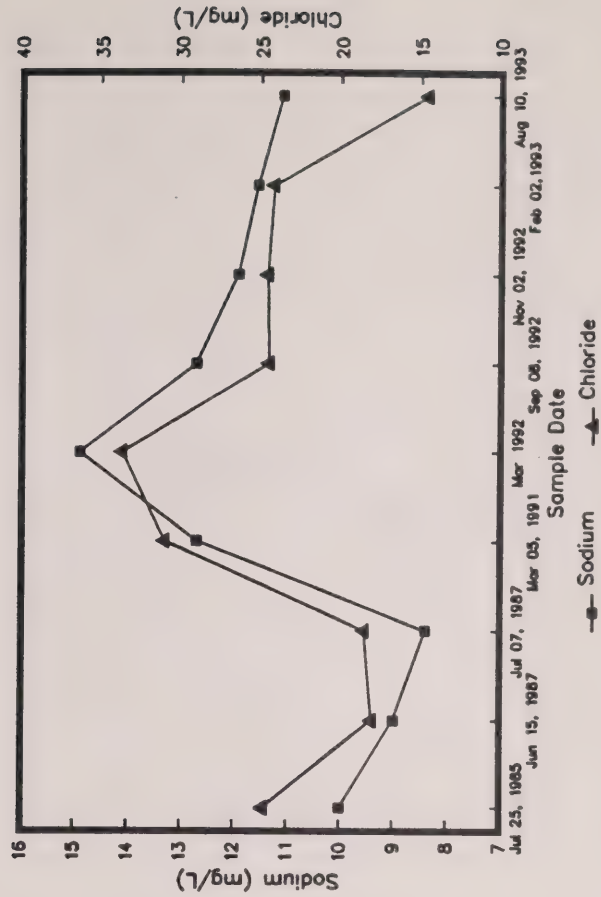
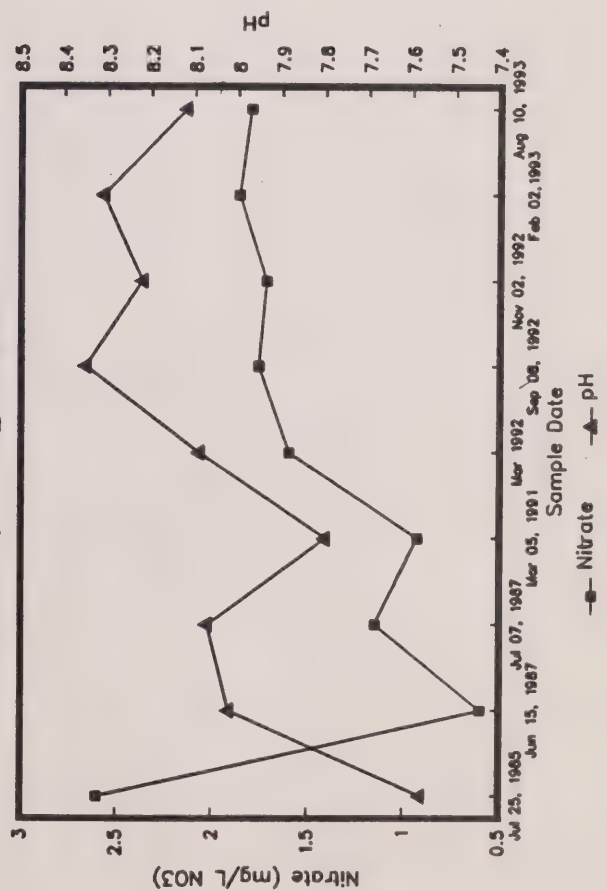
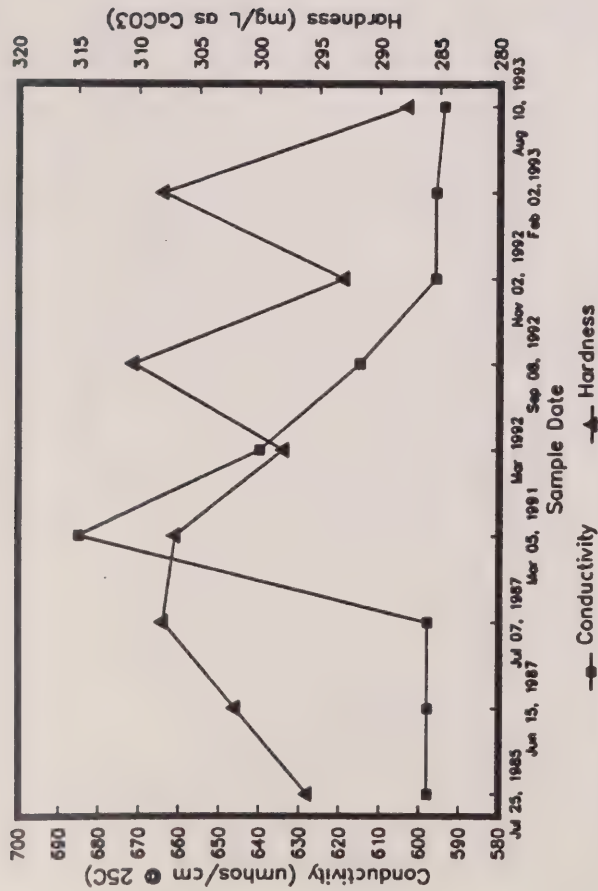


Town of Acton Municipal Well, Warren Grove WATER QUALITY TRENDS 1987 - 1990



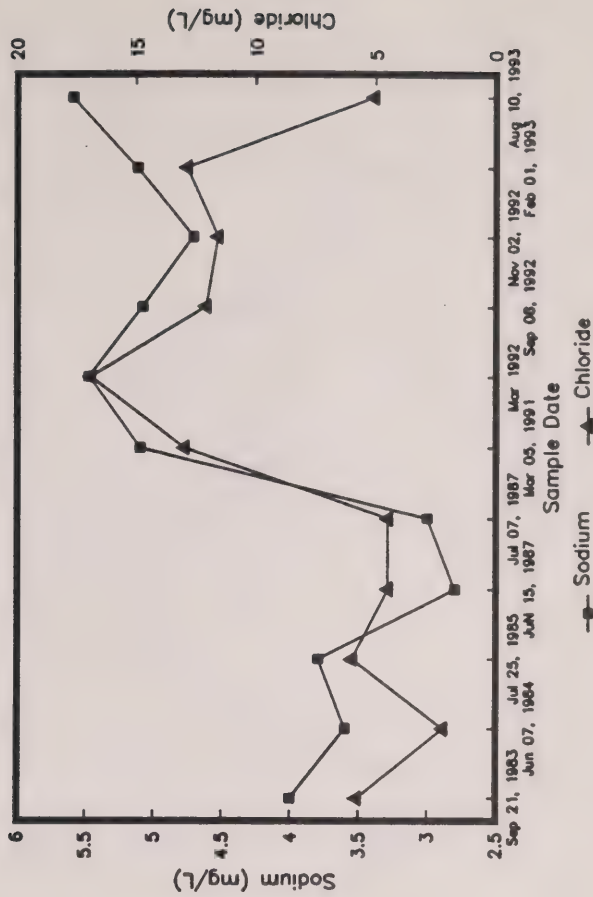
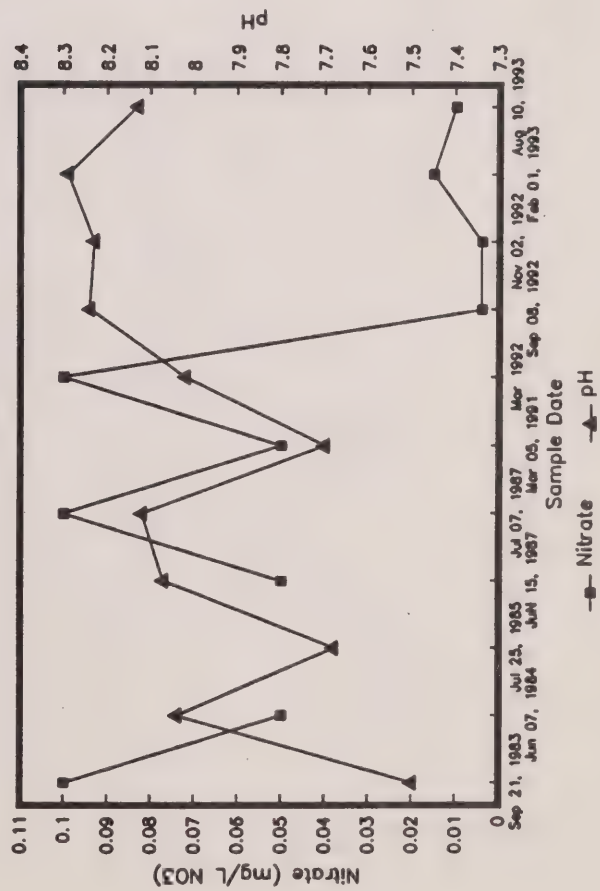
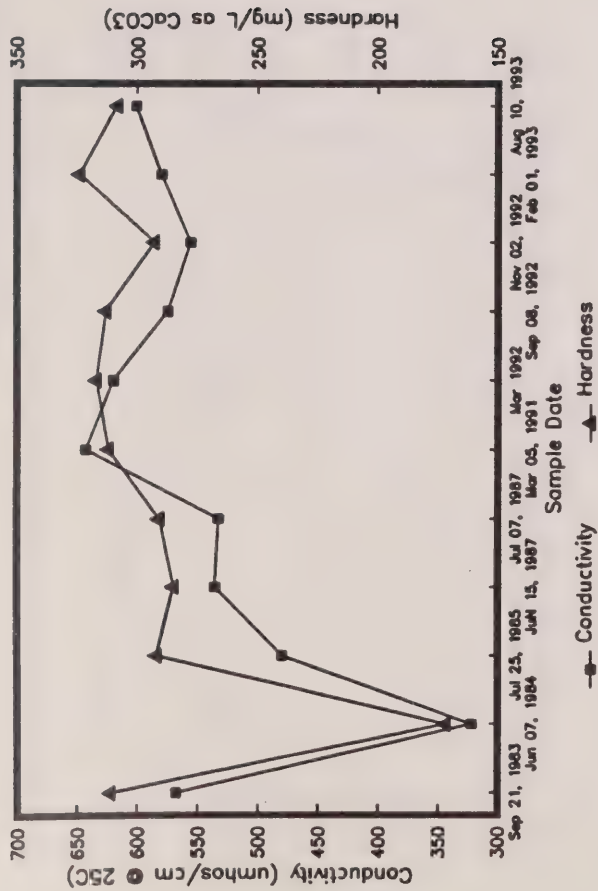
Town of Orangeville Municipal Well # 2A

WATER QUALITY TRENDS 1985 - 1993

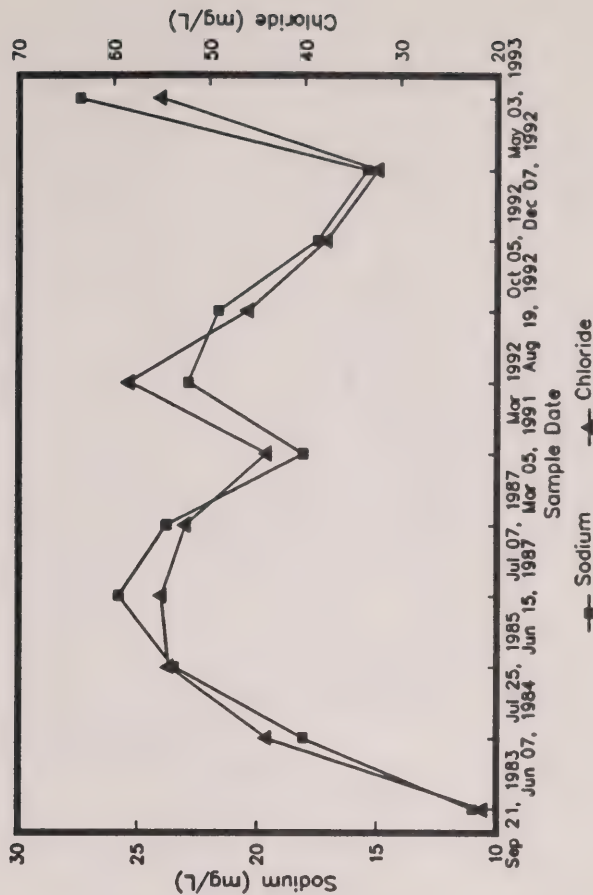
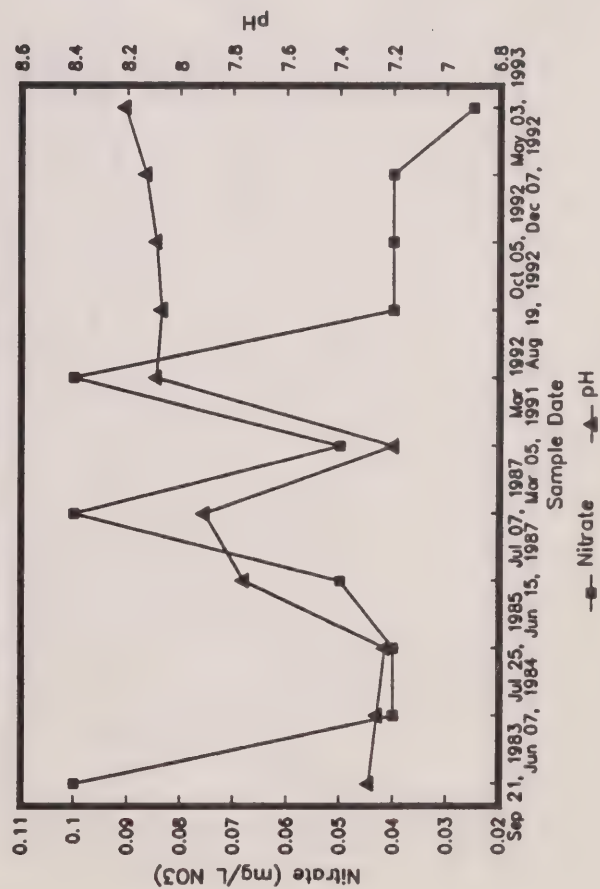
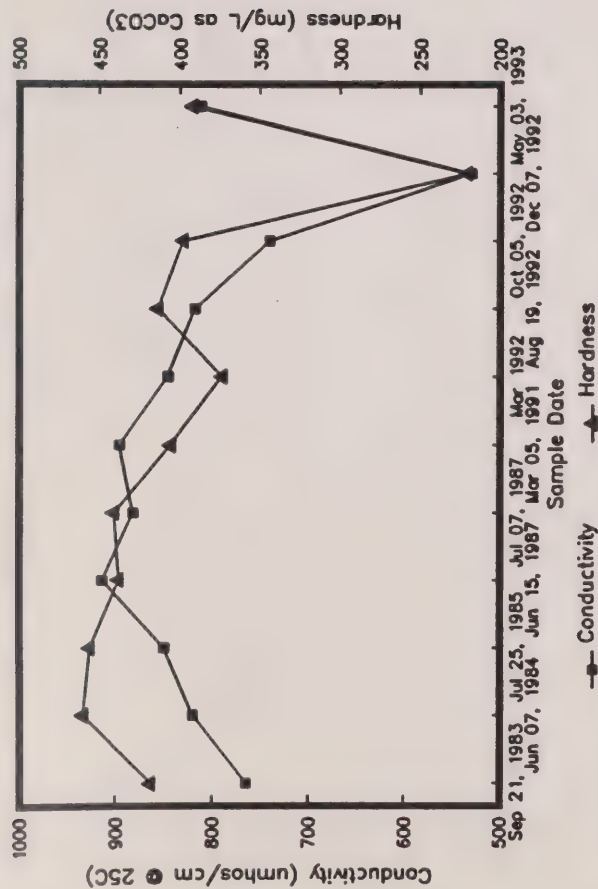


Town of Orangeville Municipal Well # 3

WATER QUALITY TRENDS 1983 - 1993

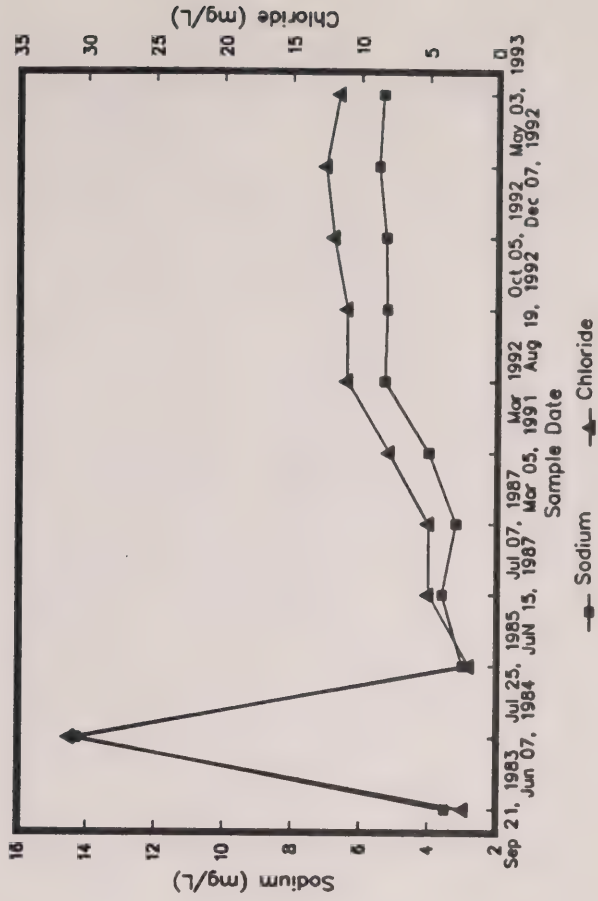
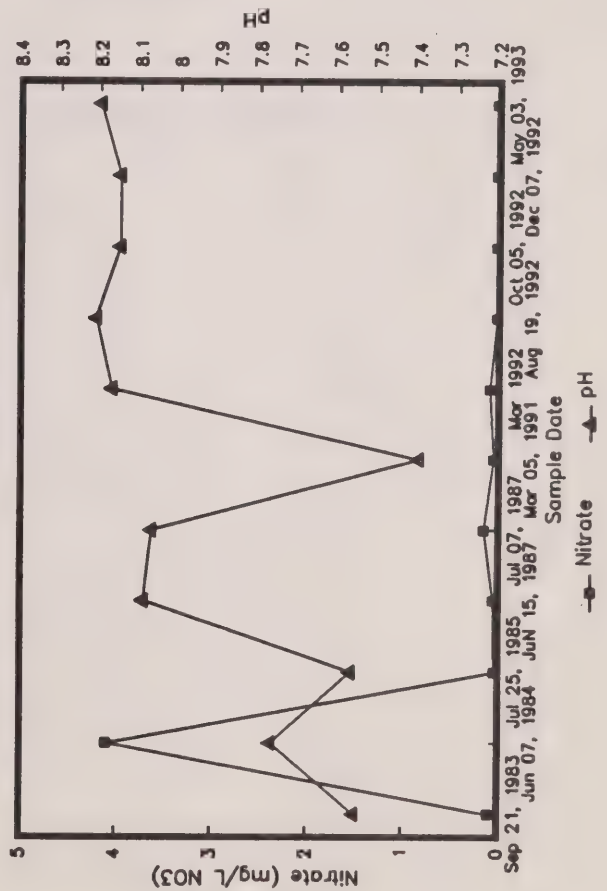
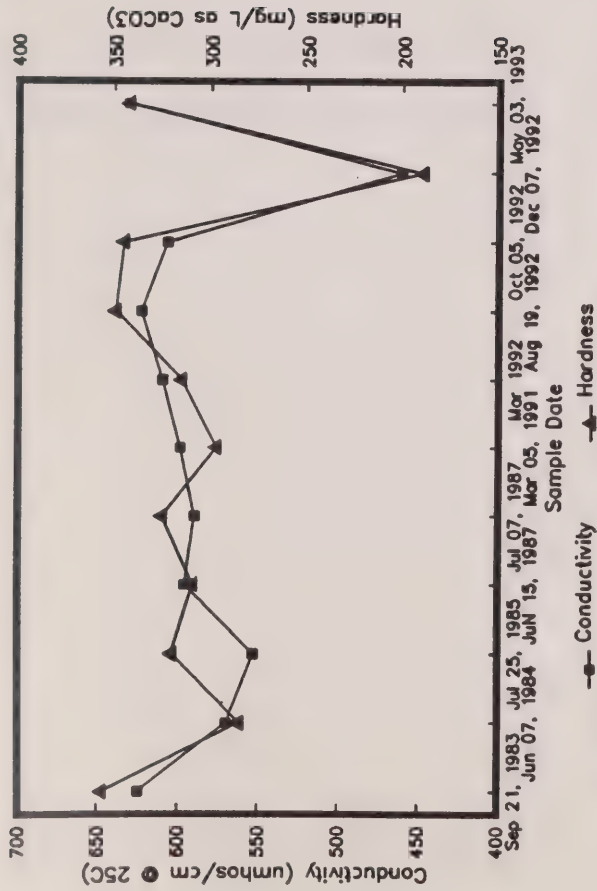


Town of Orangeville Municipal Well # 4 WATER QUALITY TRENDS 1983 - 1993

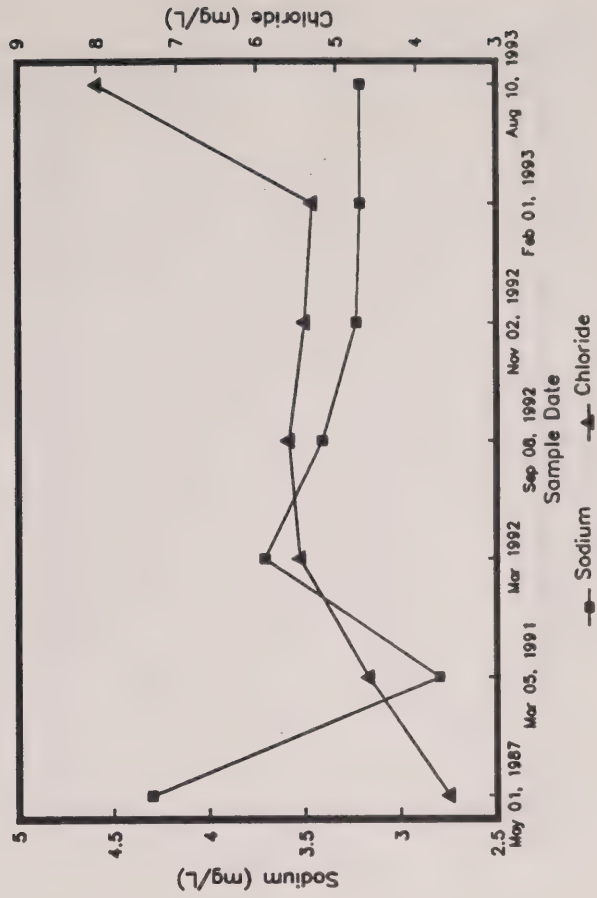
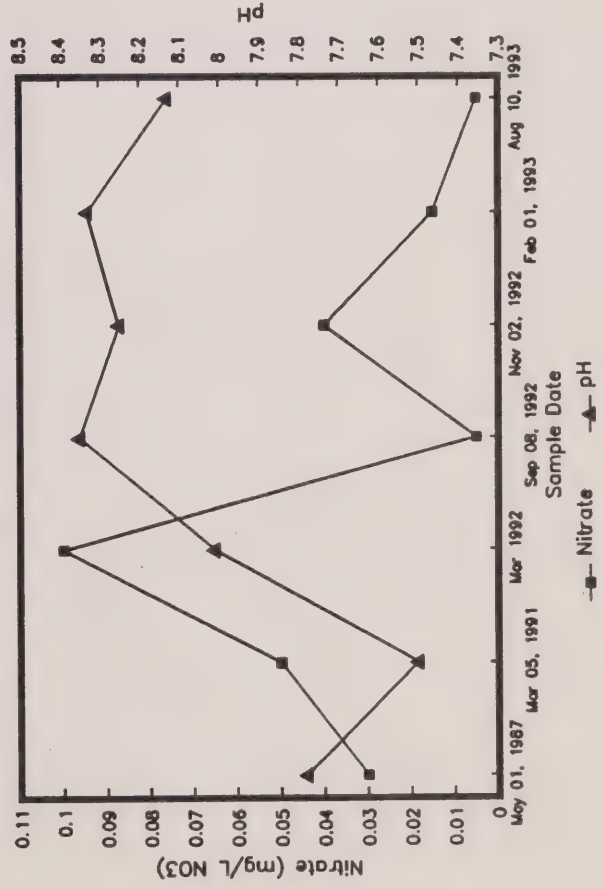
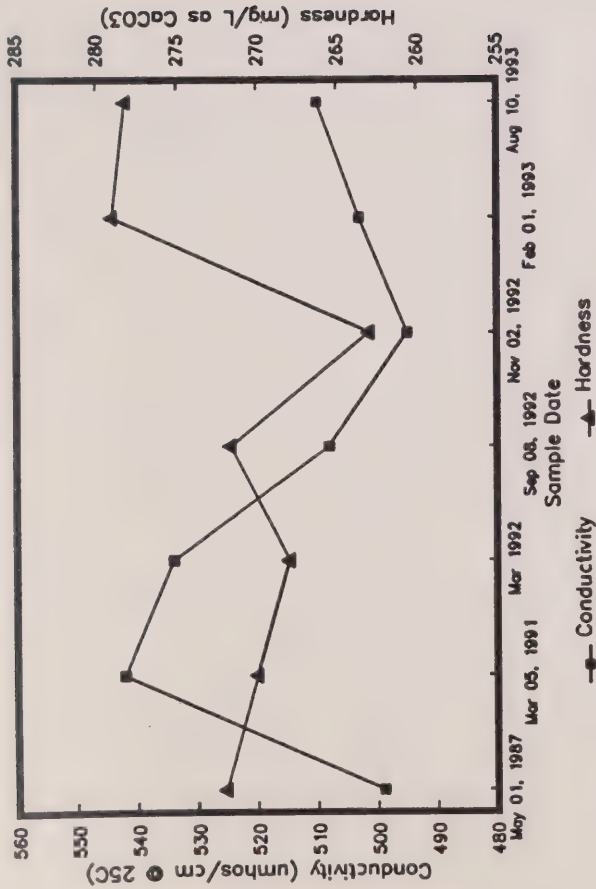


Town of Orangeville Municipal Well # 6

WATER QUALITY TRENDS 1983 - 1993

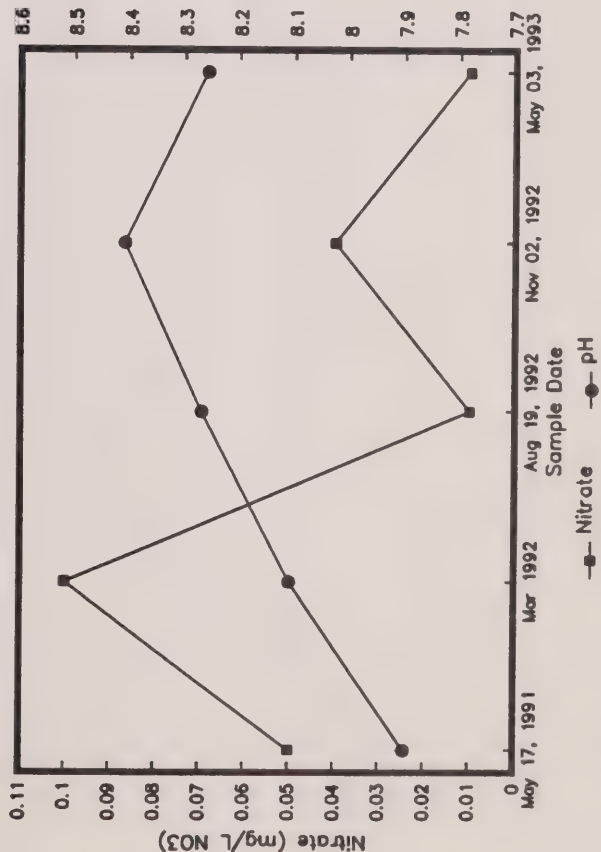
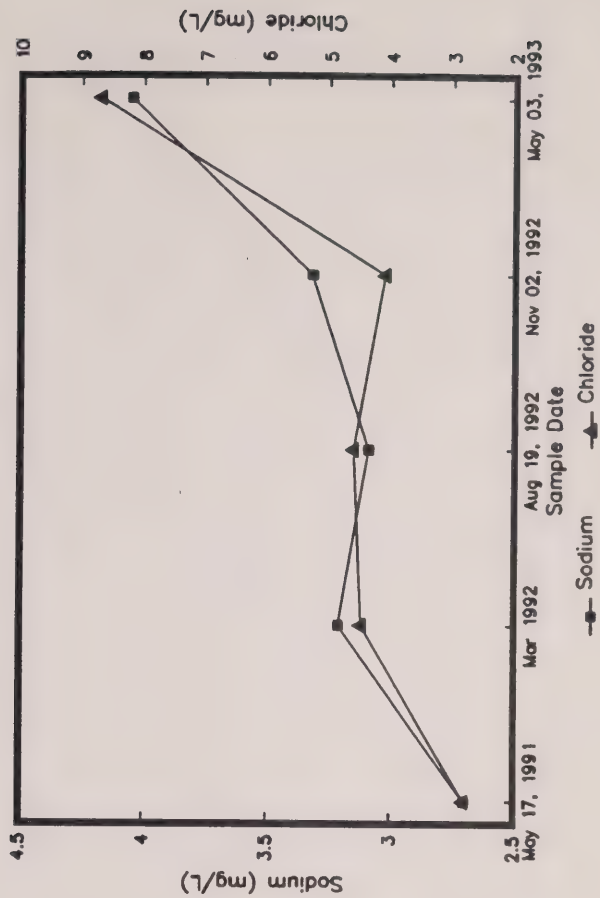
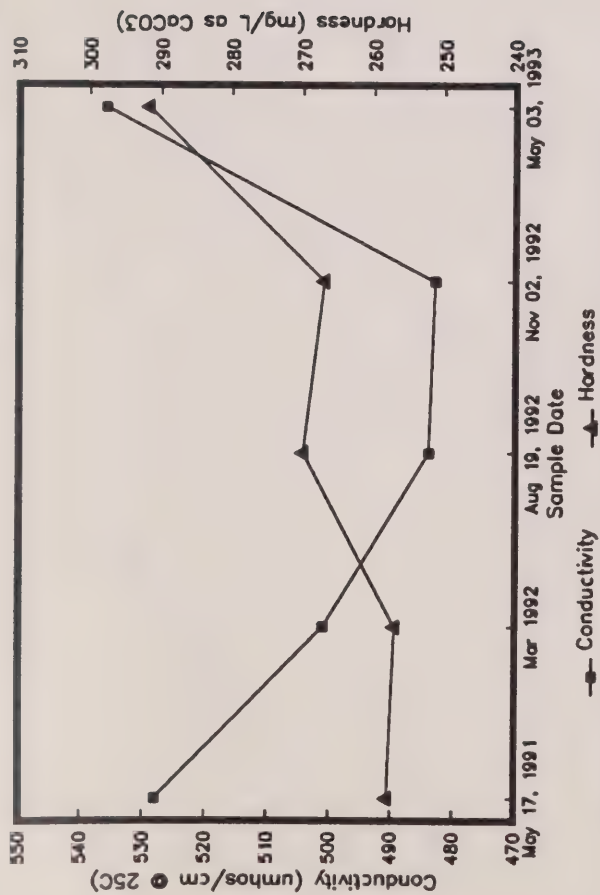


Town of Orangeville Municipal Well # 7 WATER QUALITY TRENDS 1987 - 1993



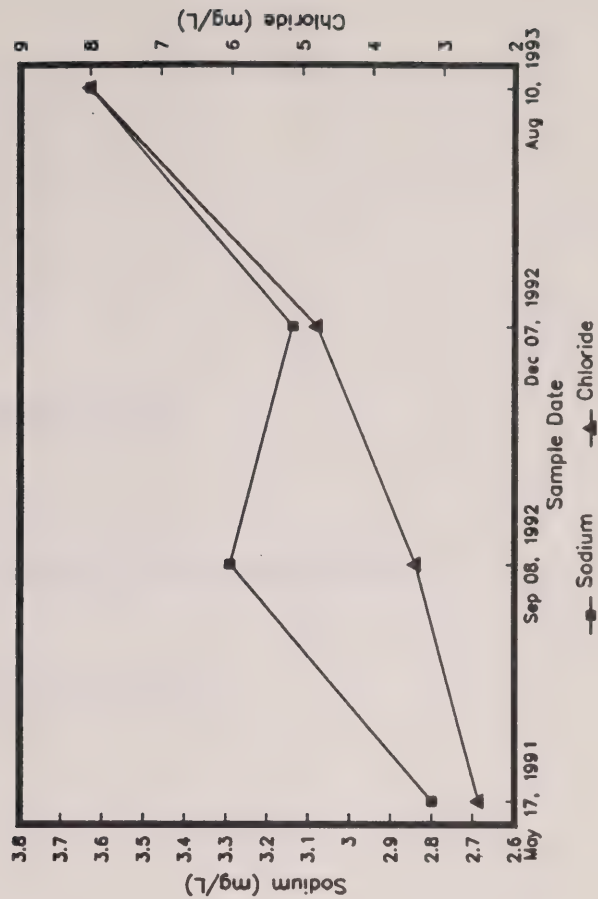
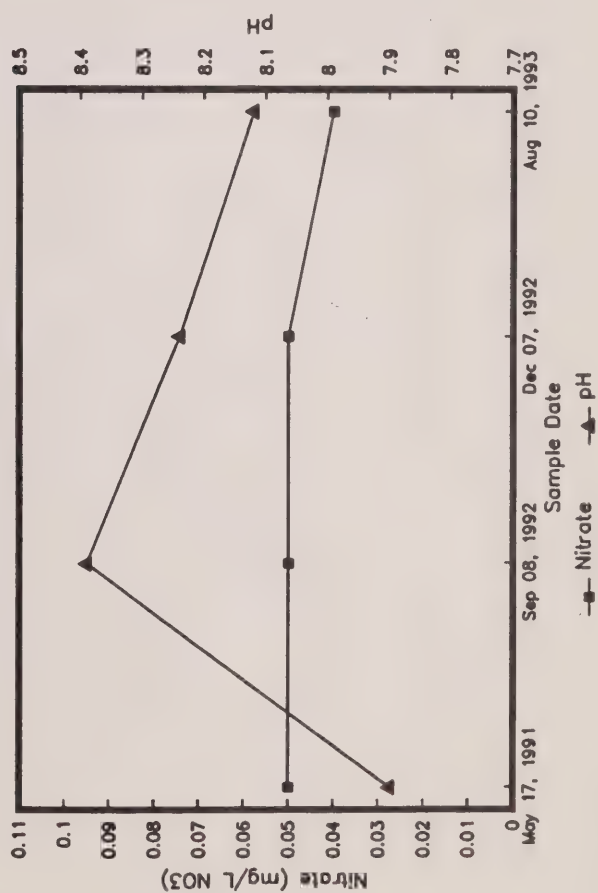
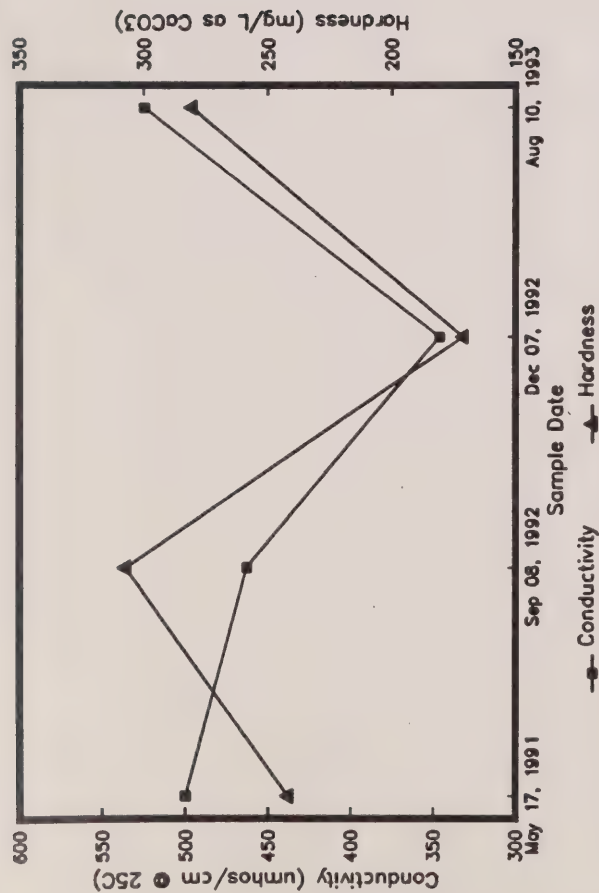
Town of Orangeville Municipal Well # 8A

WATER QUALITY TRENDS 1991 - 1993



Town of Orangeville Municipal Well # 8B

WATER QUALITY TRENDS 1991 - 1993



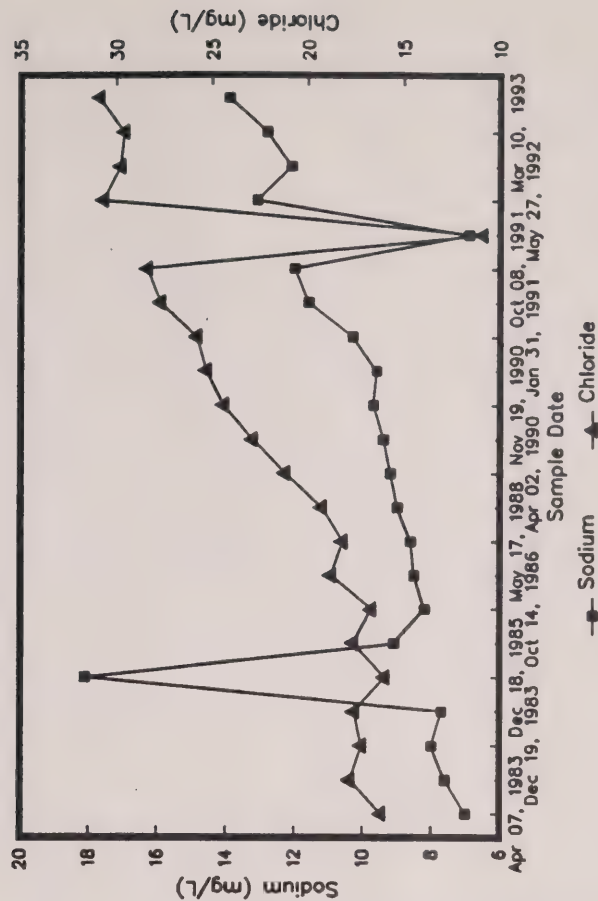
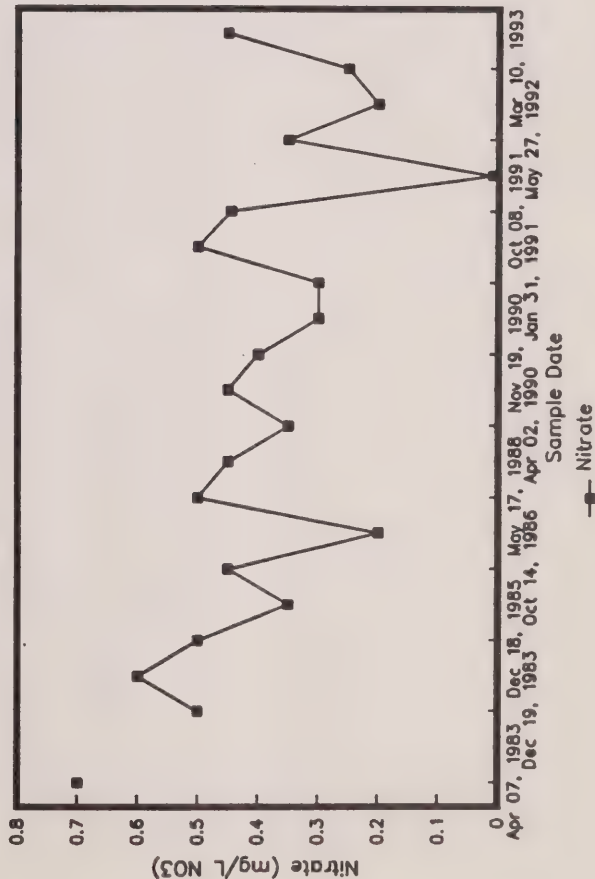
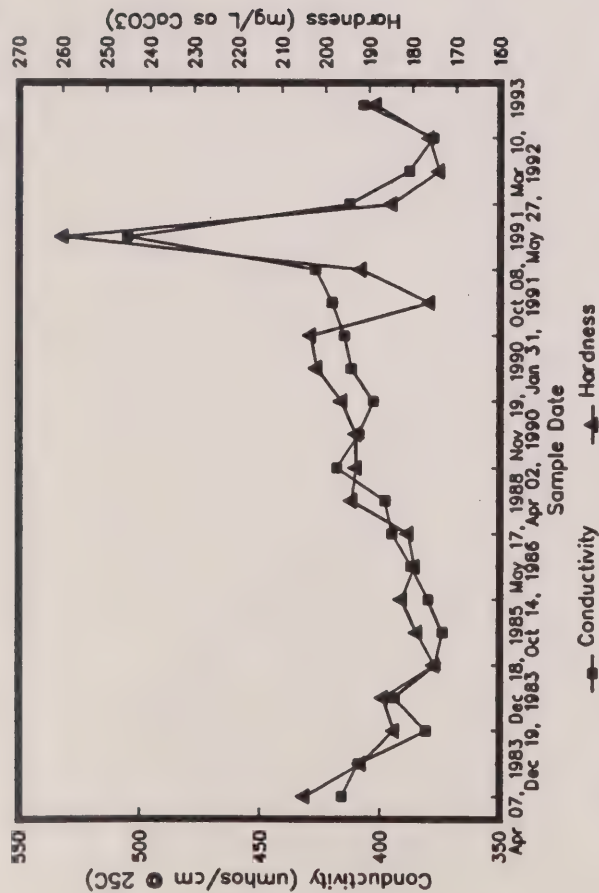
APPENDIX VI

WATER QUALITY TRENDS IN GROUNDWATER

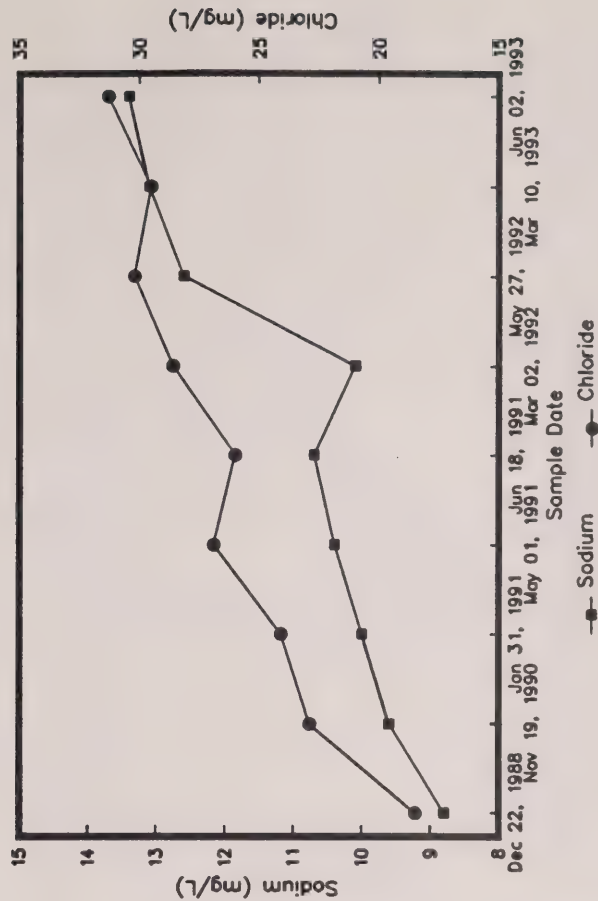
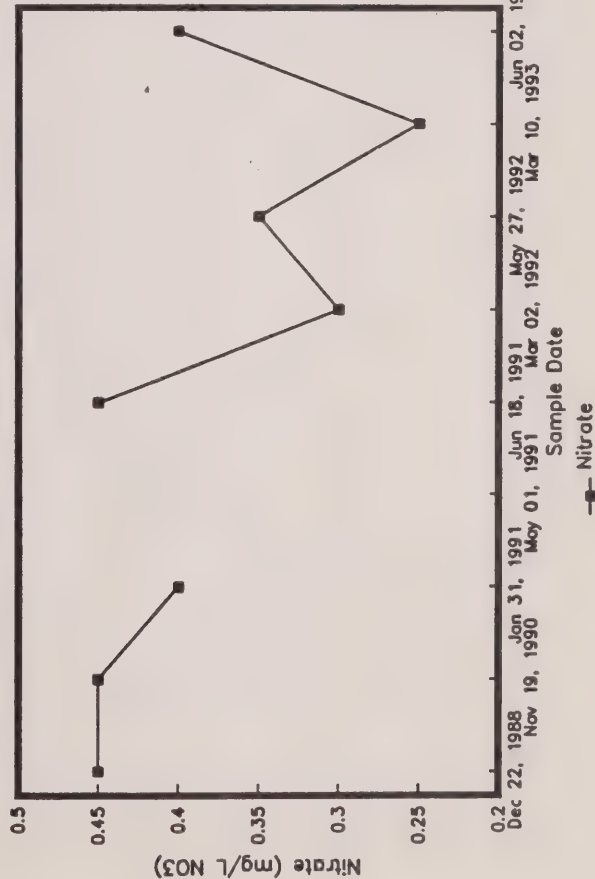
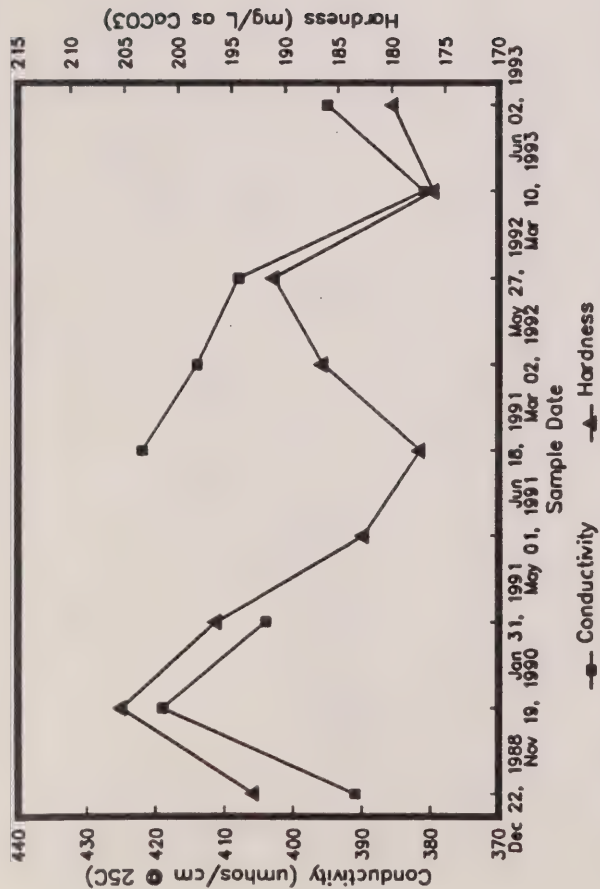
(OVERBURDEN WELLS)

Town of Caledon Municipal Well # 3

WATER QUALITY TRENDS 1983 - 1993

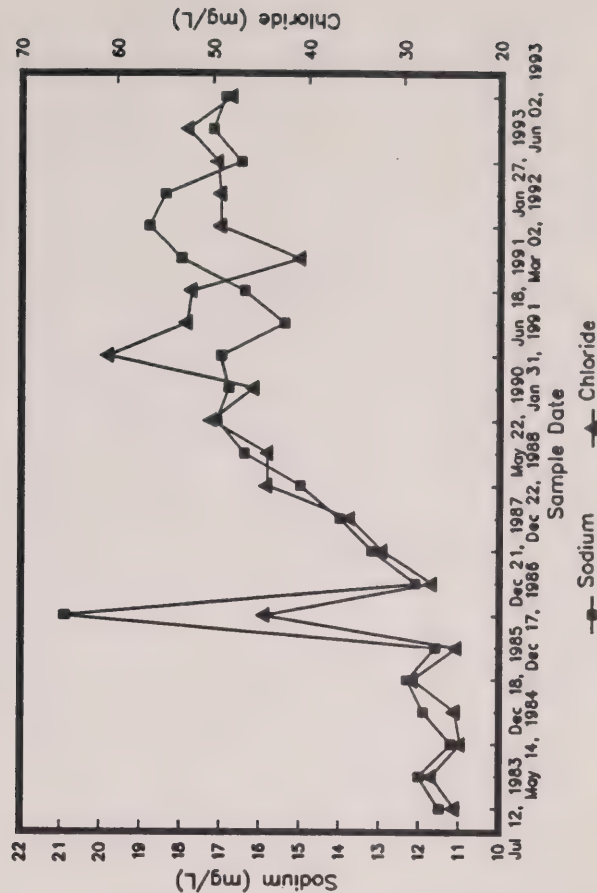
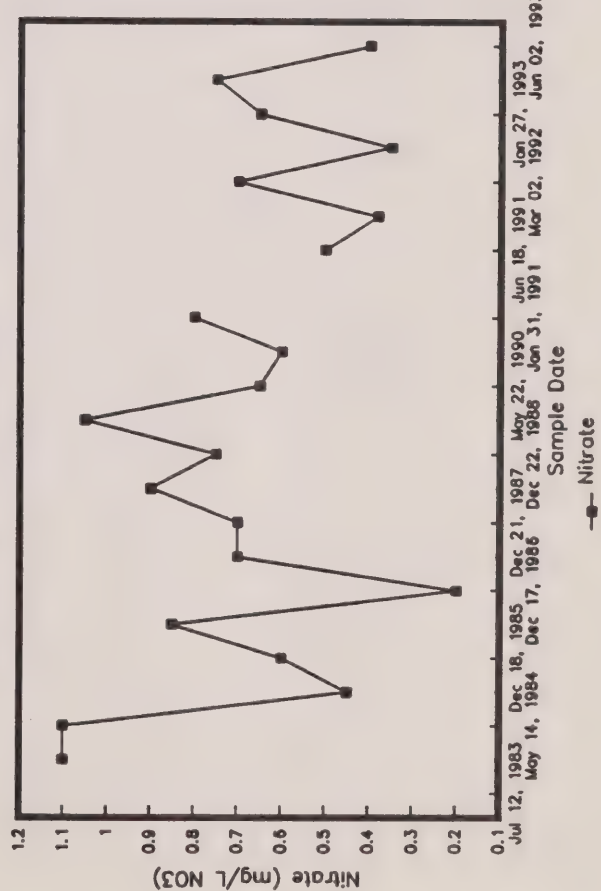
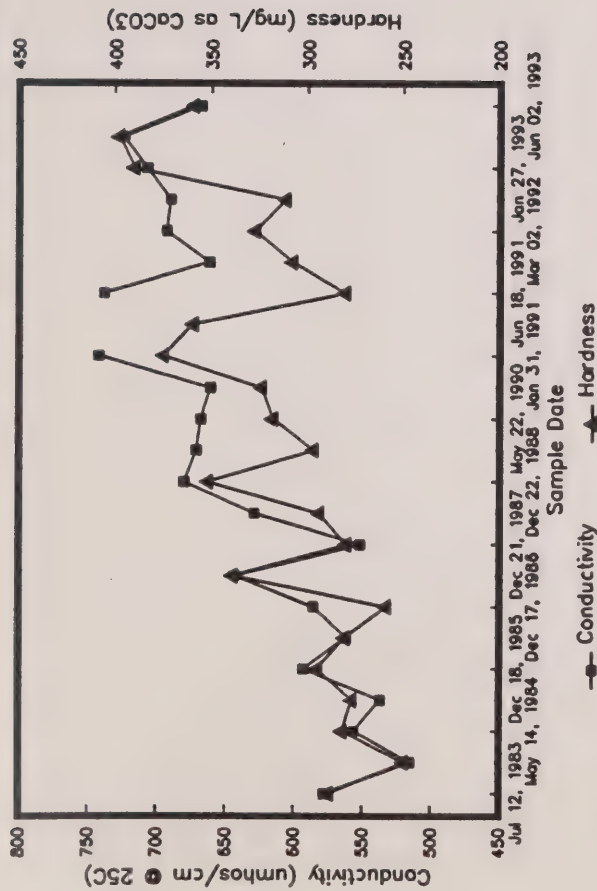


Town of Caledon Municipal Well # 4 WATER QUALITY TRENDS 1988 - 1993



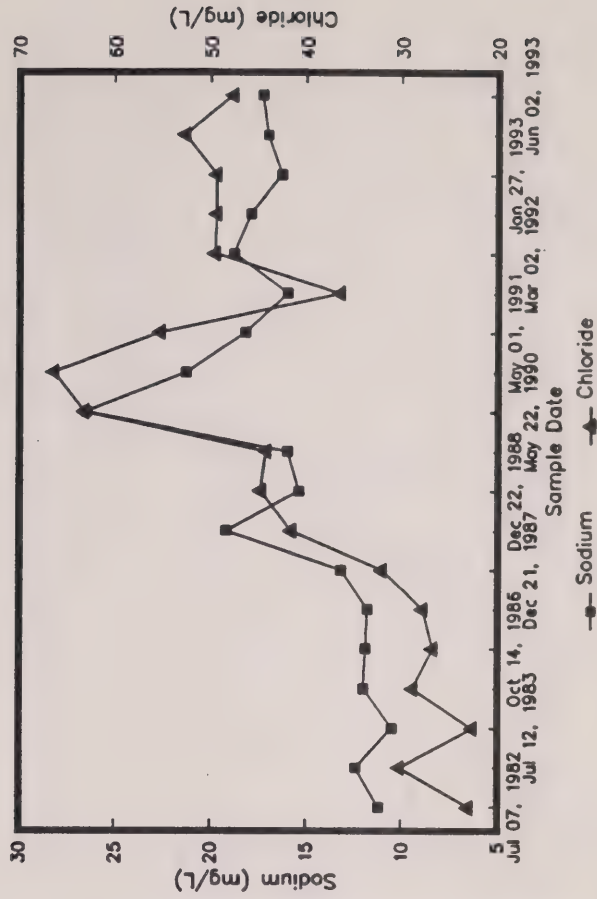
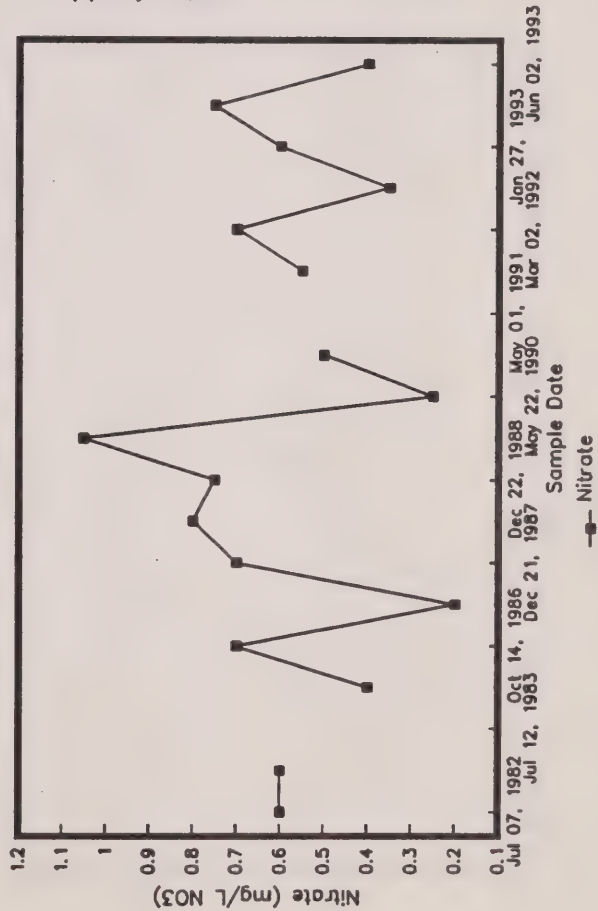
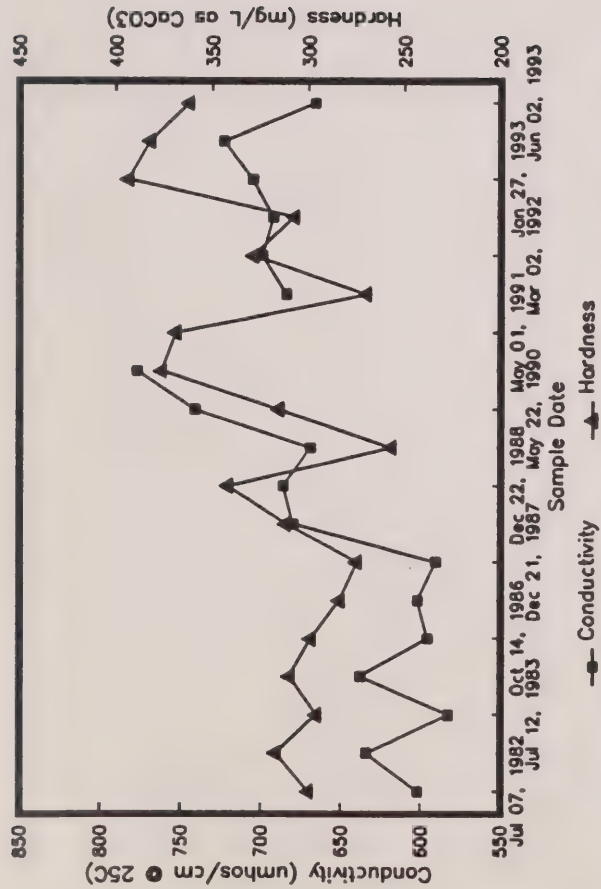
Town of Inglewood Municipal Well # 1

WATER QUALITY TRENDS 1983 - 1993

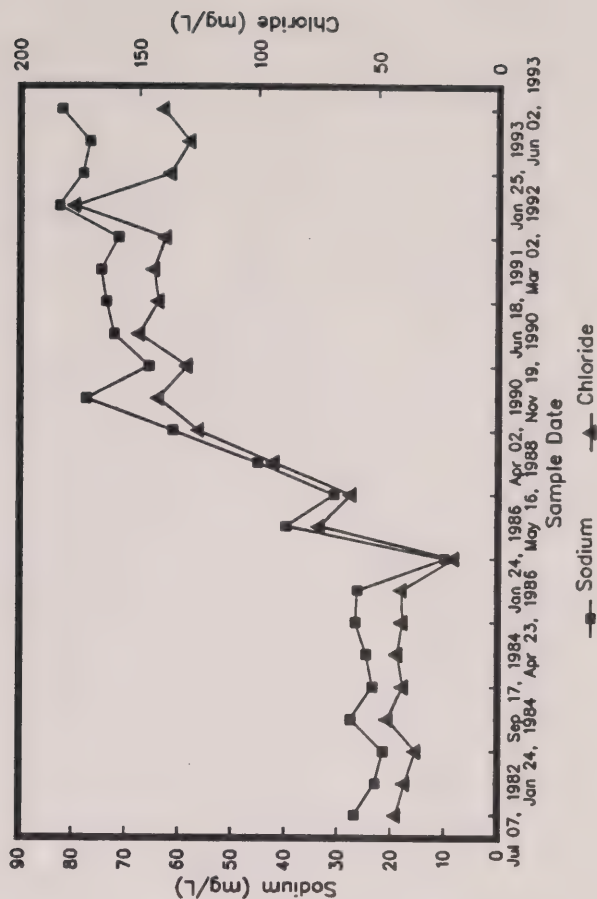
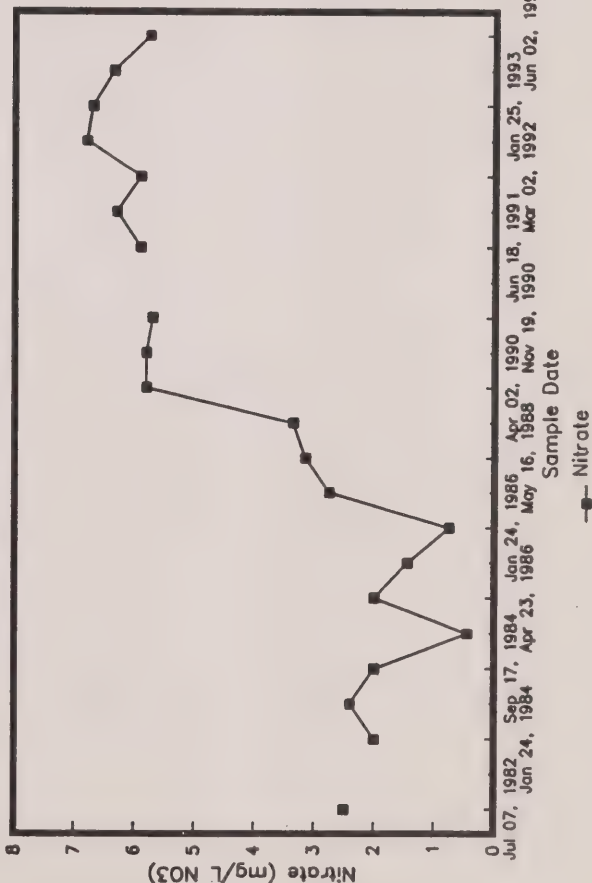
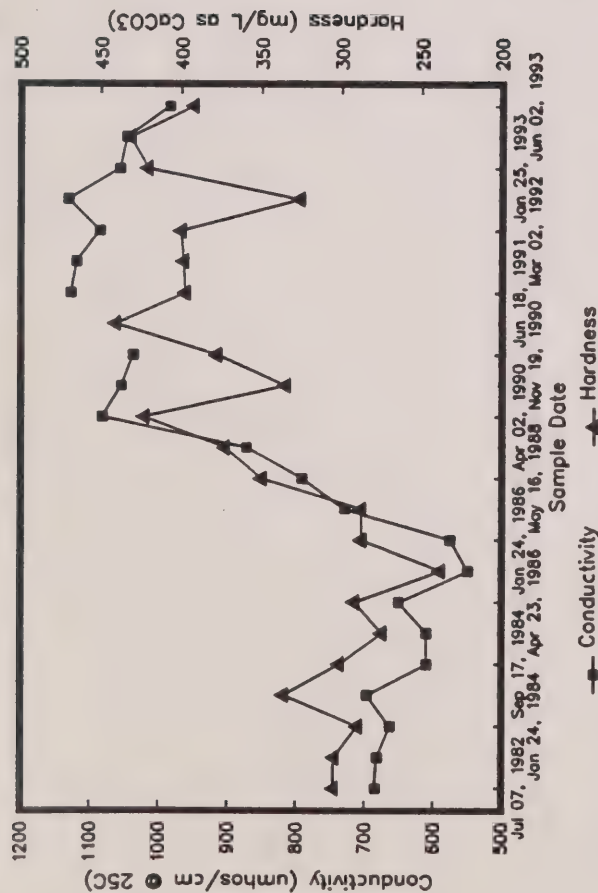


Town of Inglewood Municipal Well # 2

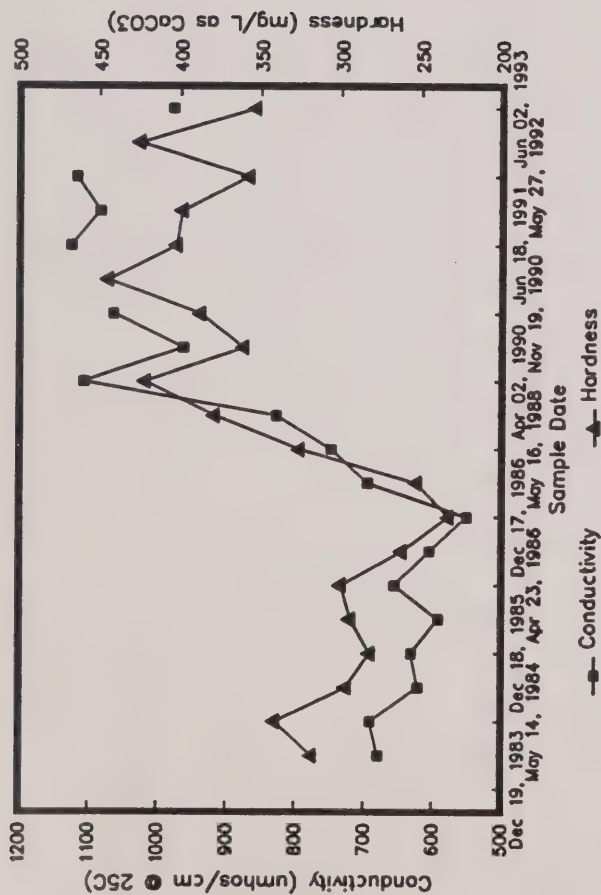
WATER QUALITY TRENDS 1982 - 1993



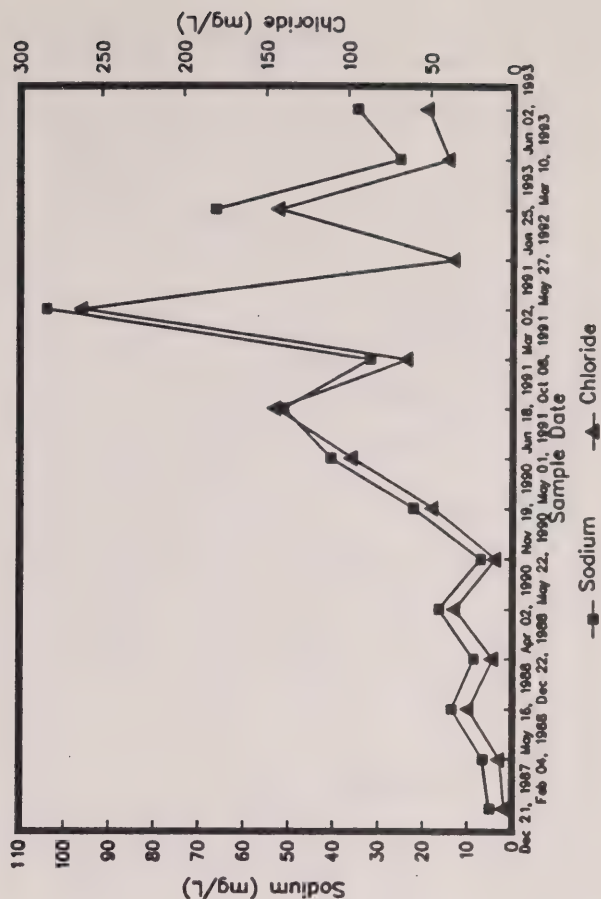
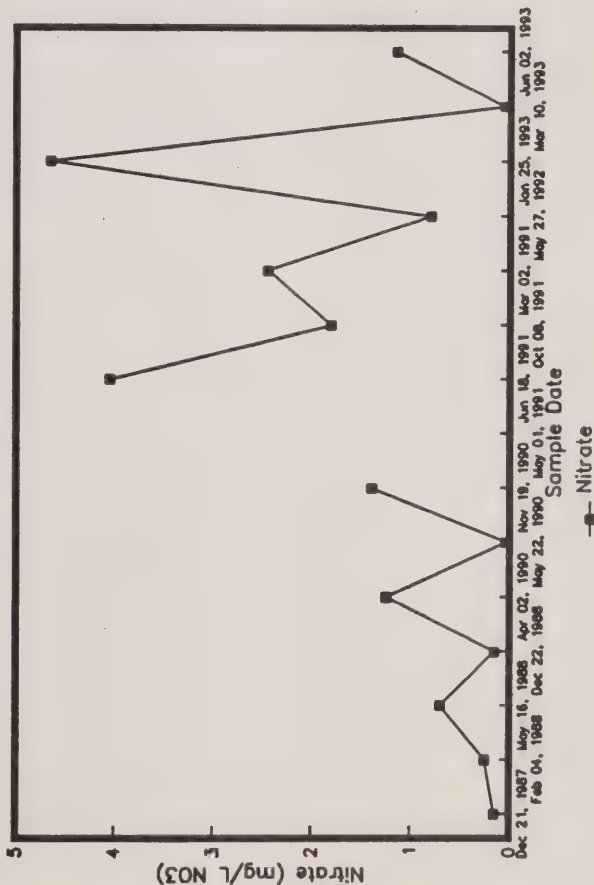
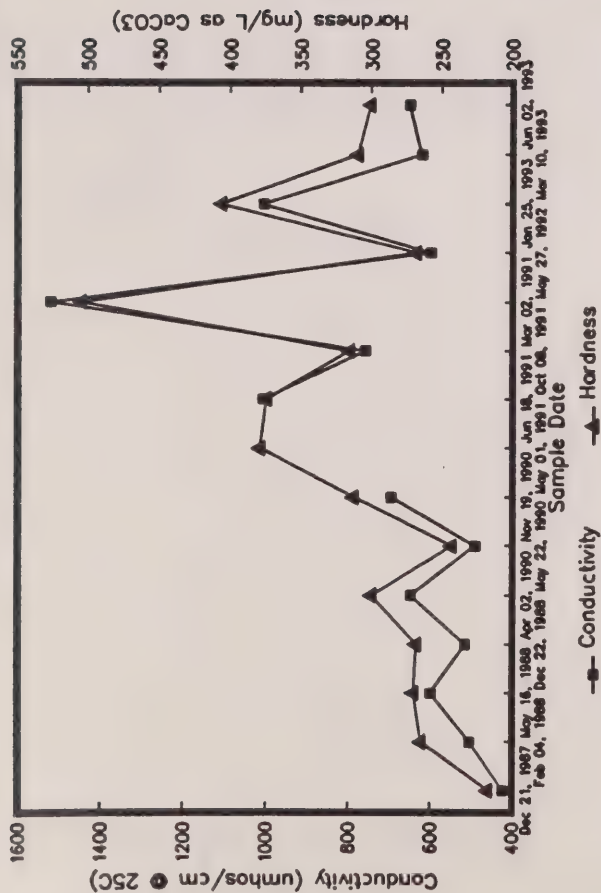
Town of Alton Municipal Well # 1 WATER QUALITY TRENDS 1982 - 1993



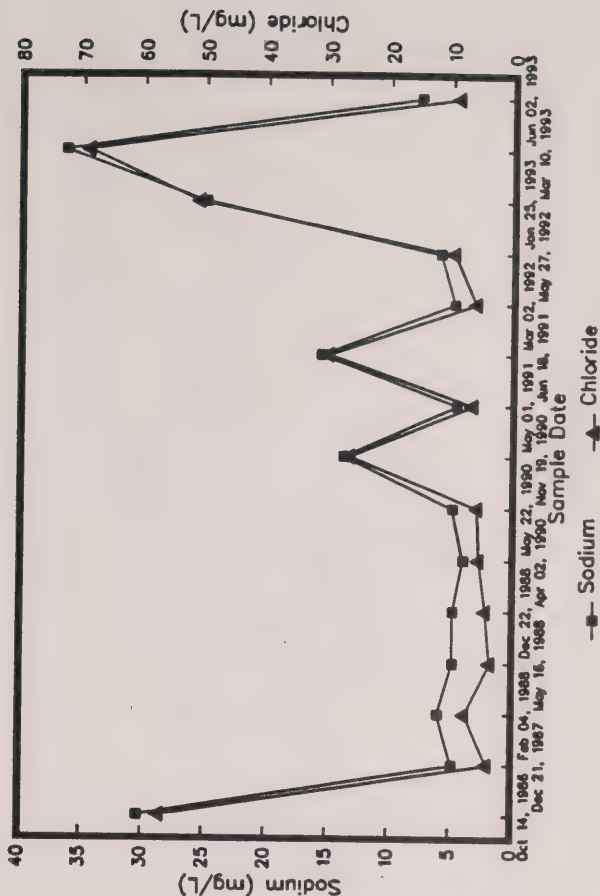
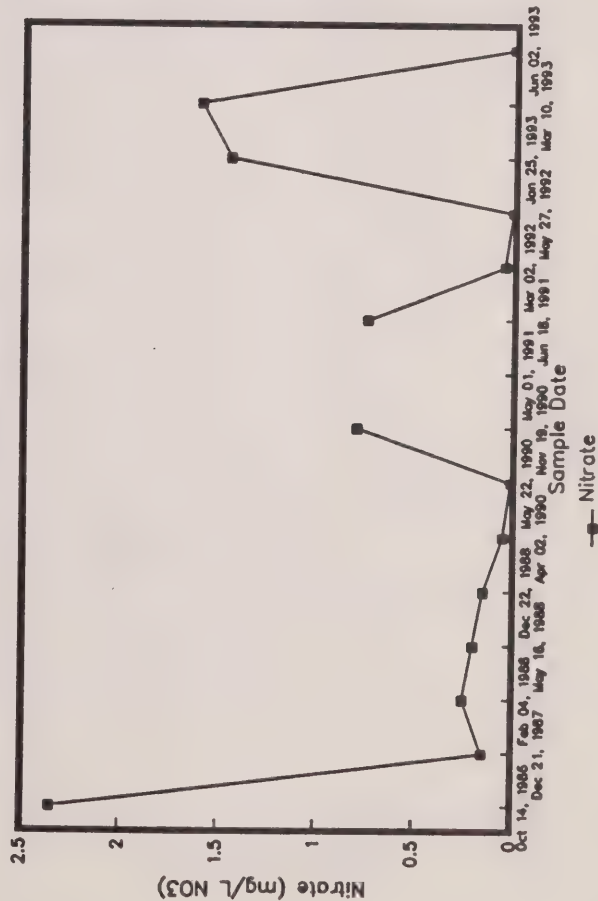
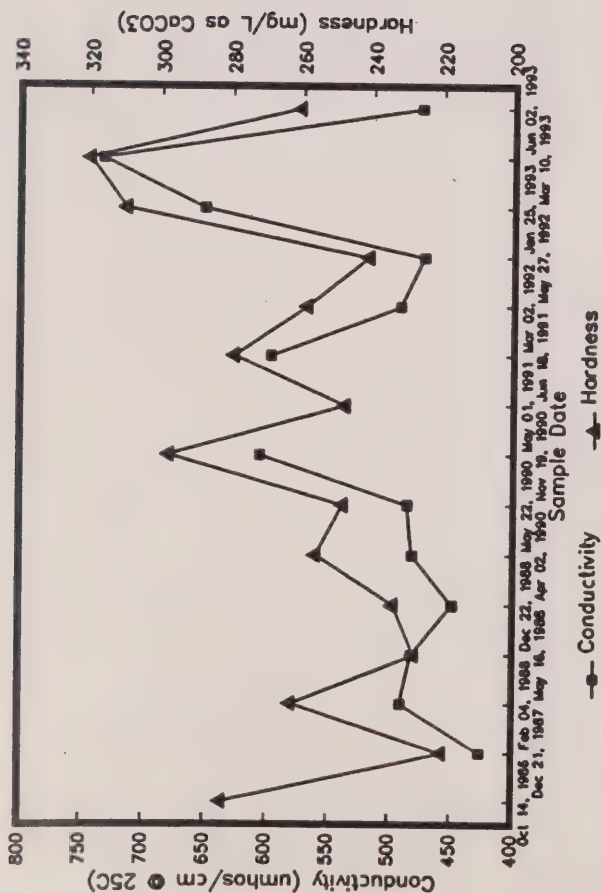
Town of Alton Municipal Well # 2 WATER QUALITY TRENDS 1983 - 1993



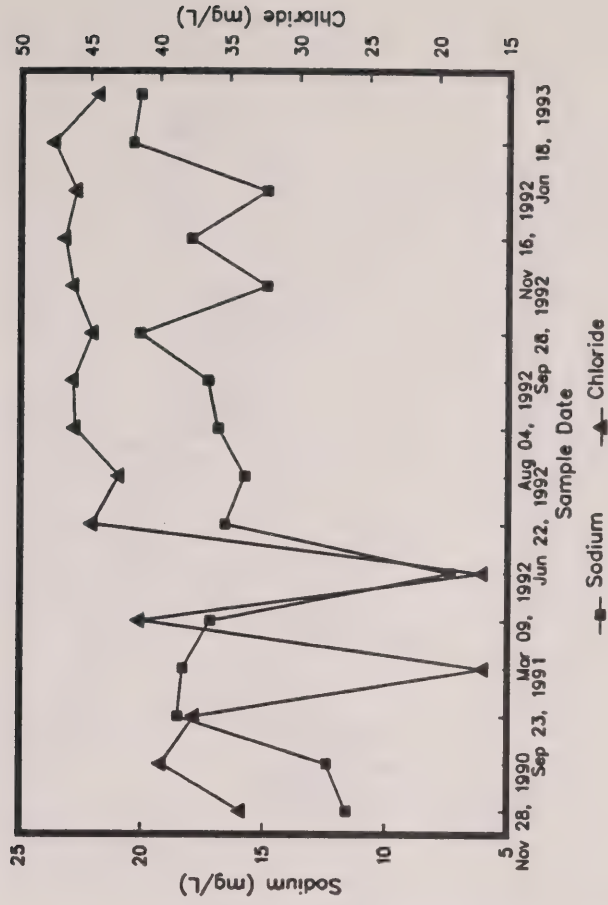
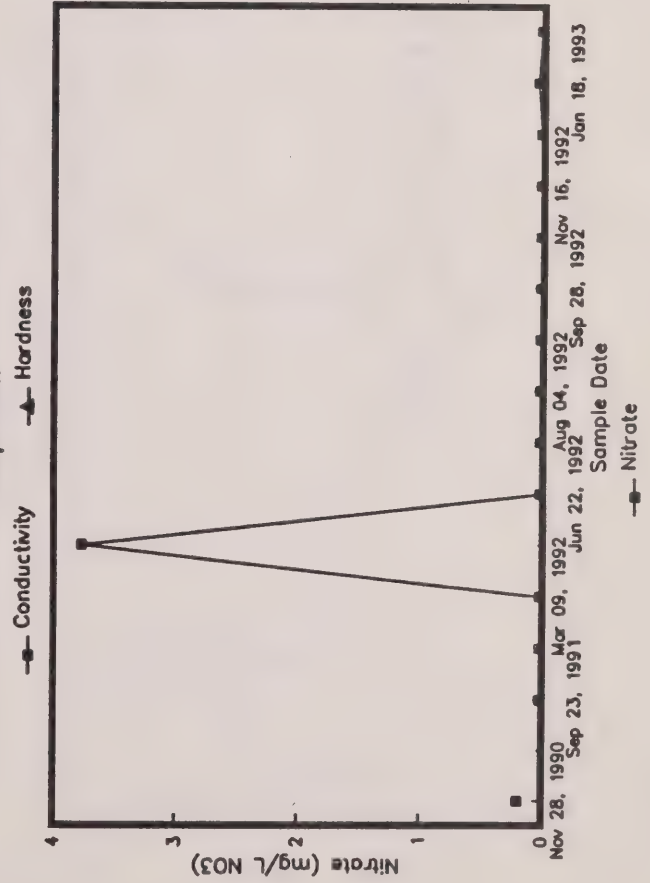
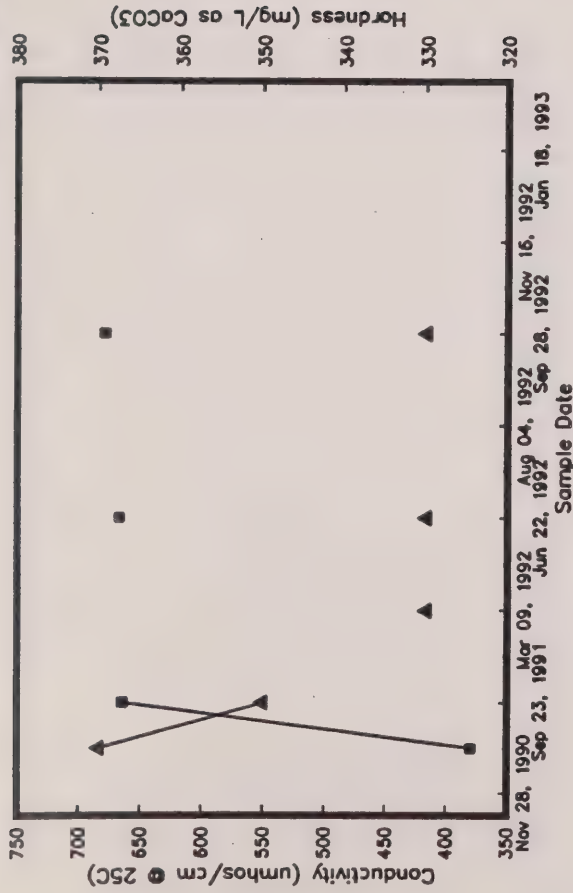
Town of Alton Municipal Well # 3 WATER QUALITY TRENDS 1987 - 1993



Town of Alton Municipal Well # 4 **WATER QUALITY TRENDS 1986 - 1993**

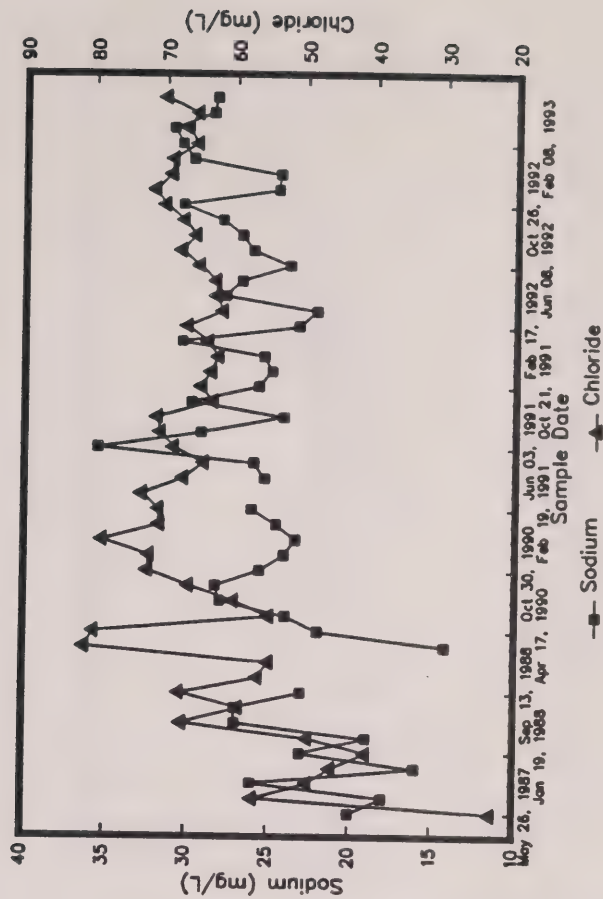
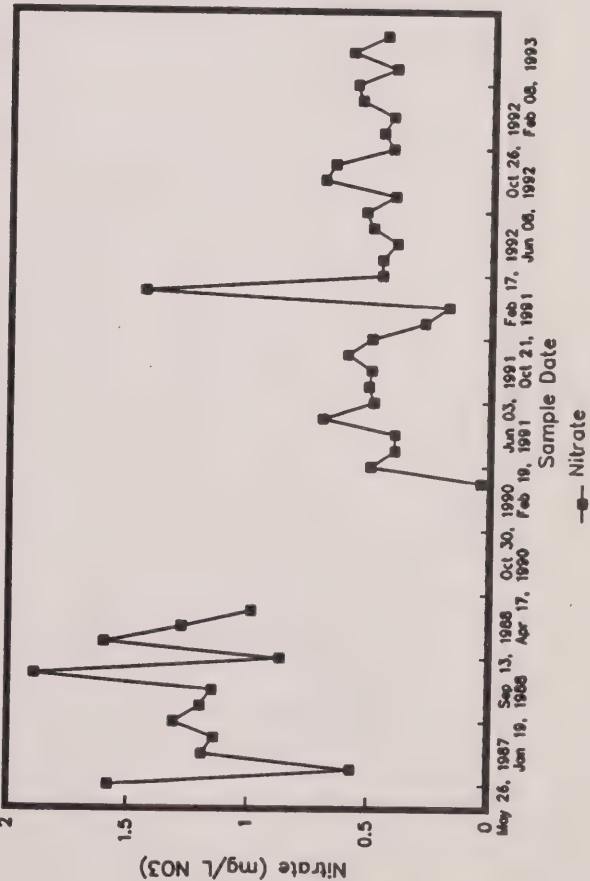
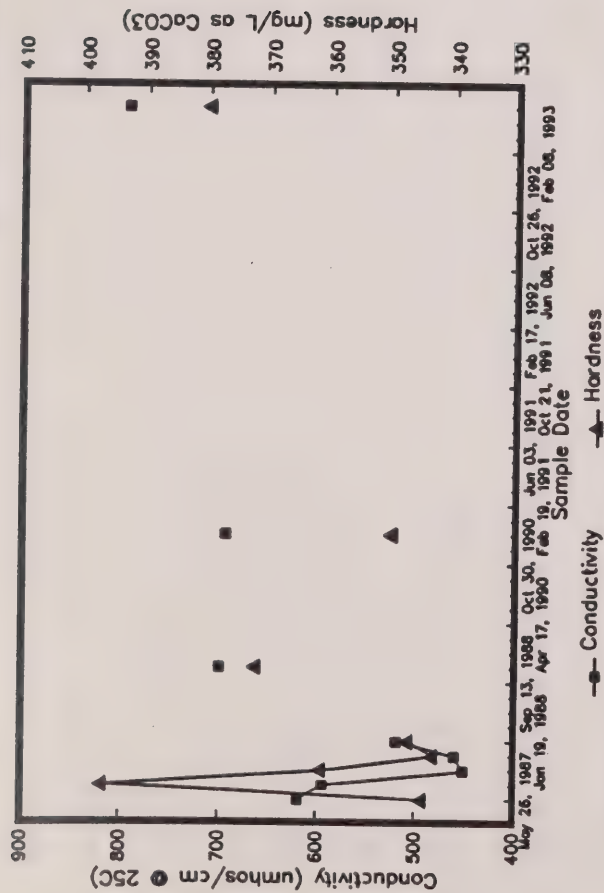


Town of Acton Municipal Well, Prospect Park WATER QUALITY TRENDS 1990 - 1993



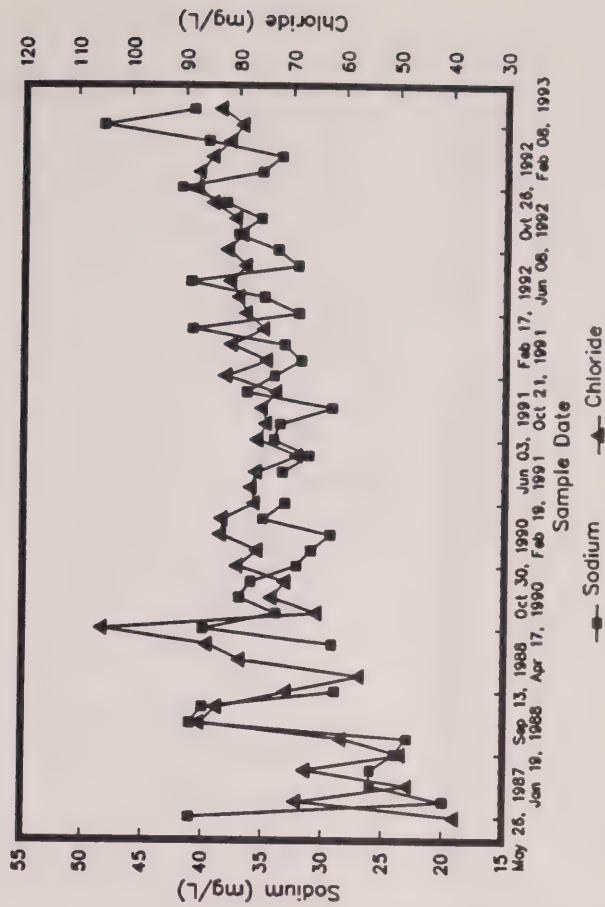
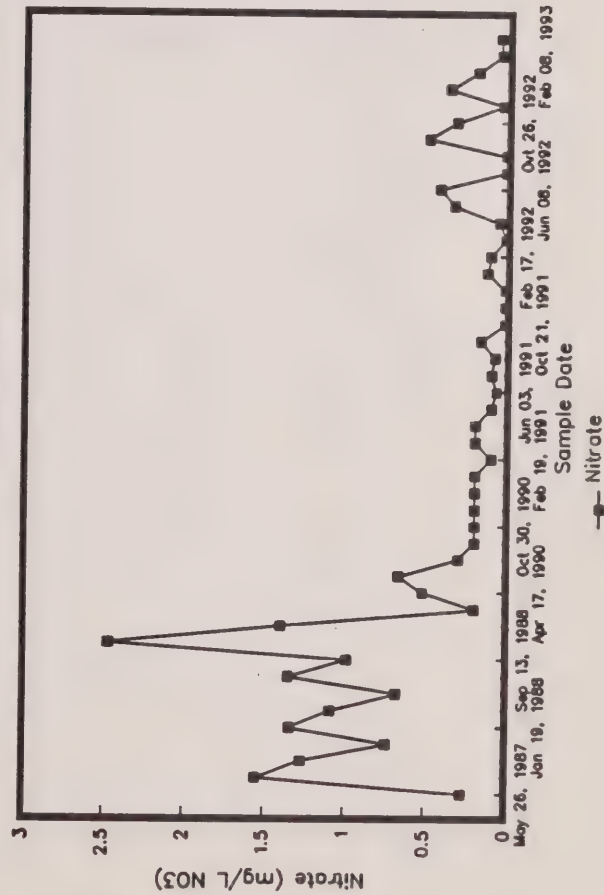
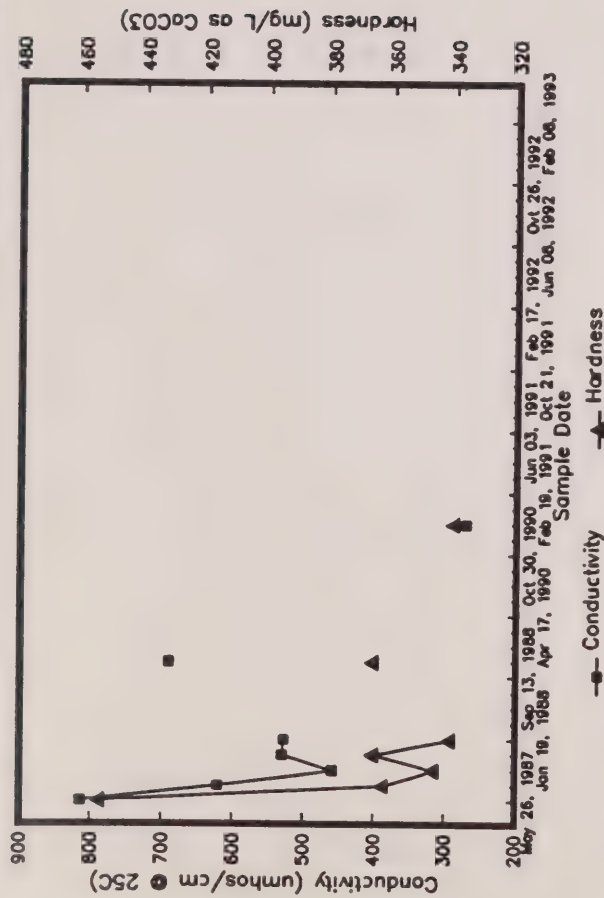
Town of Georgetown Municipal Well # 1

WATER QUALITY TRENDS 1987 - 1993

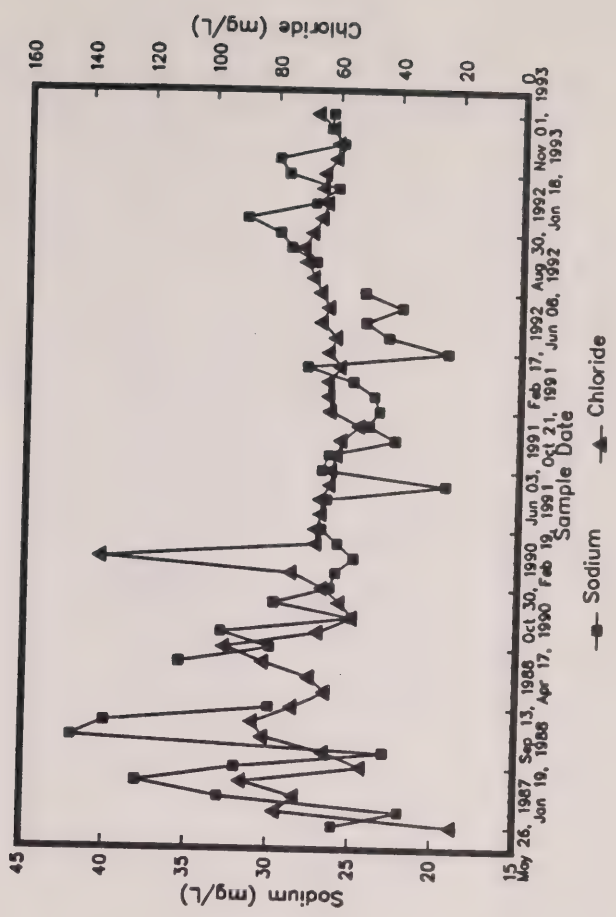
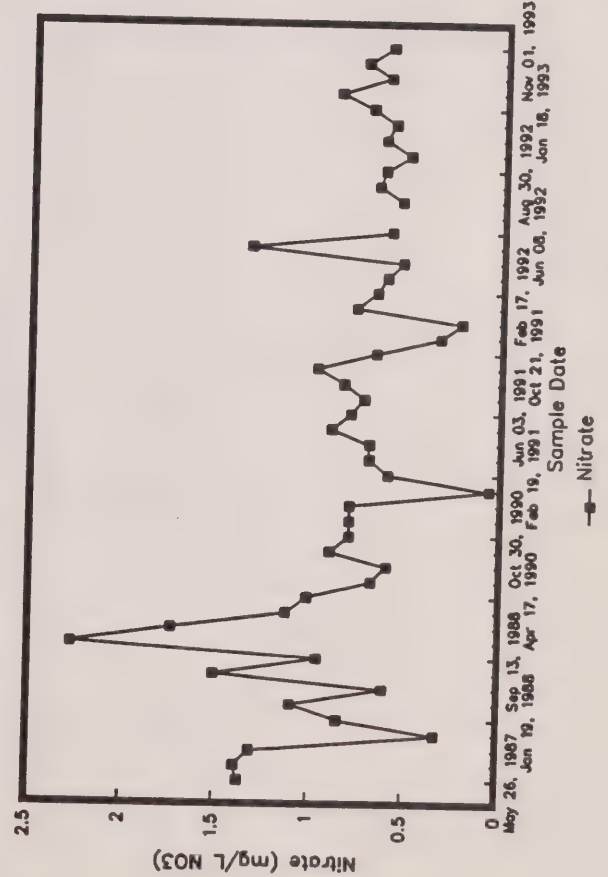
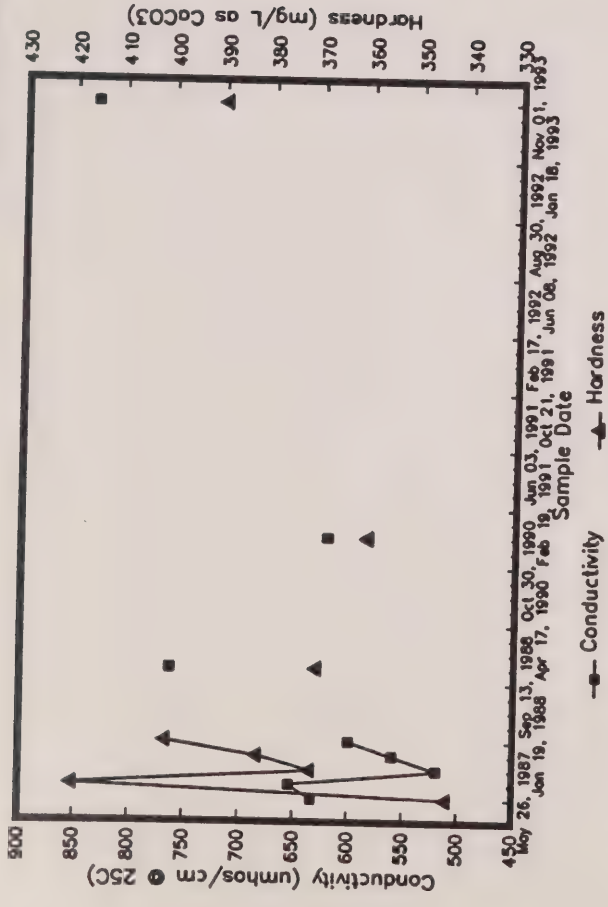


Town of Georgetown Municipal Well # 2

WATER QUALITY TRENDS 1987 - 1993

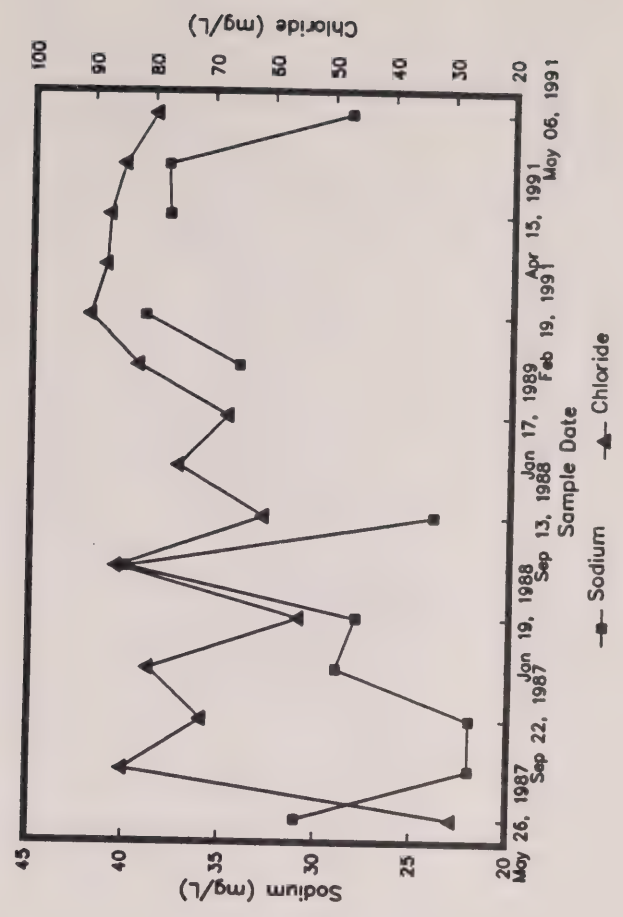
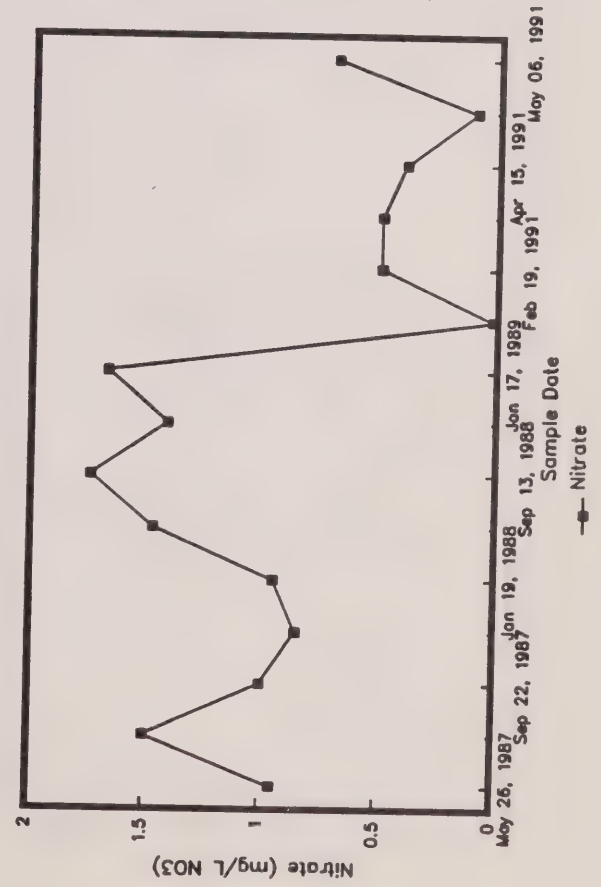
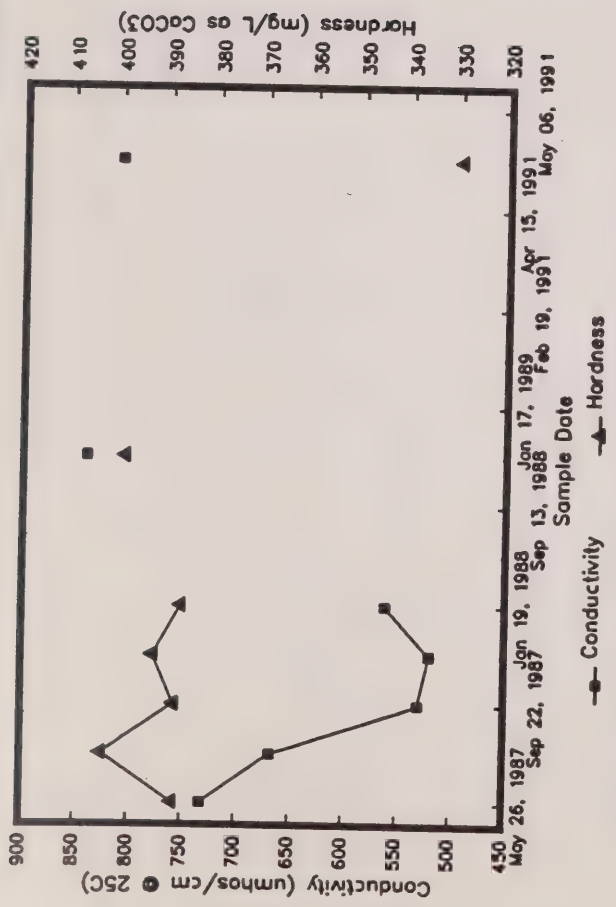


Town of Georgetown Municipal Well # 3 WATER QUALITY TRENDS 1987 - 1993



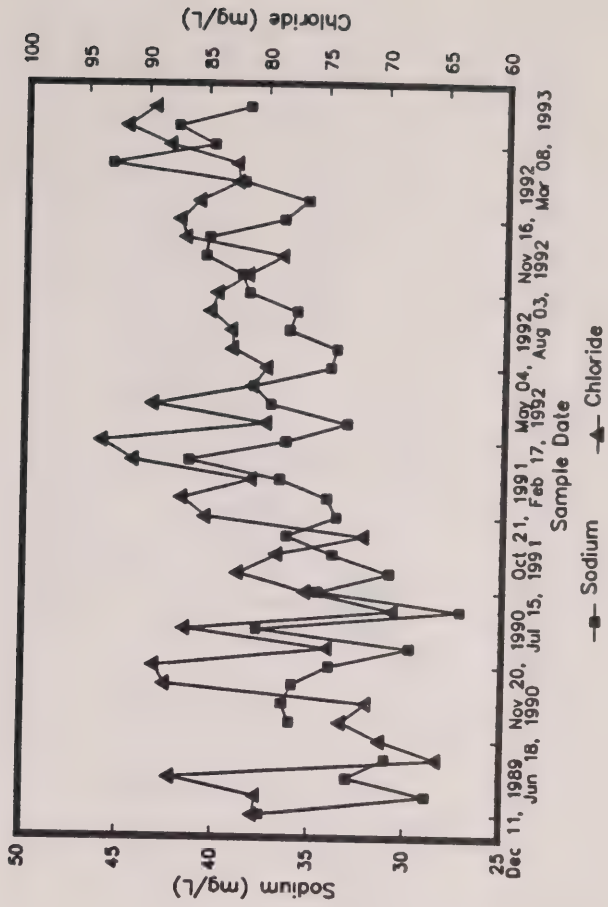
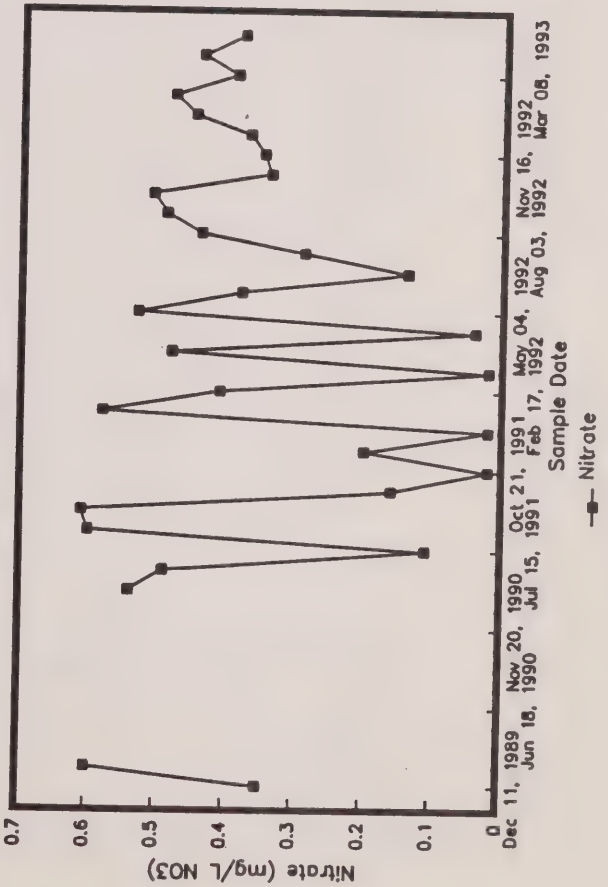
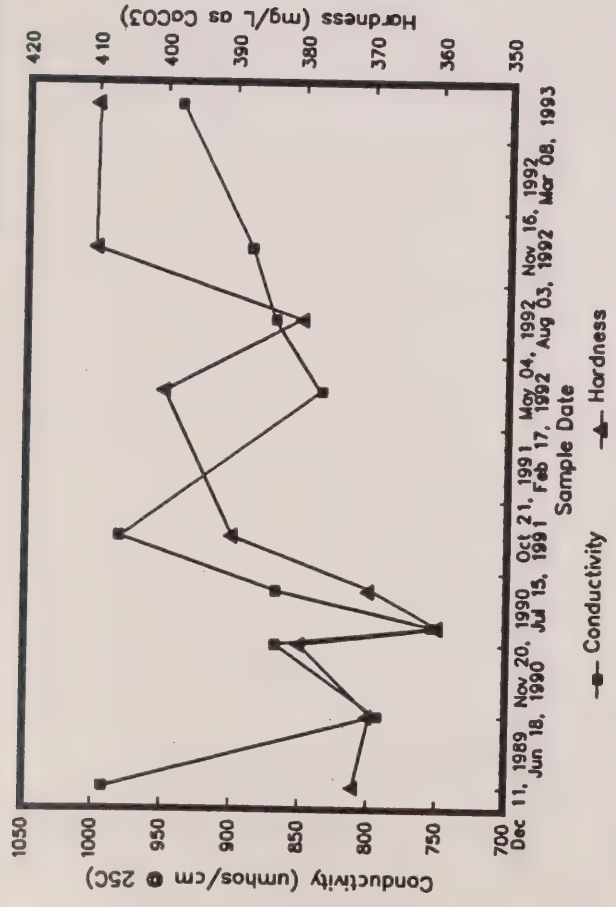
Town of Georgetown Municipal Well # 4

WATER QUALITY TRENDS 1987 - 1991

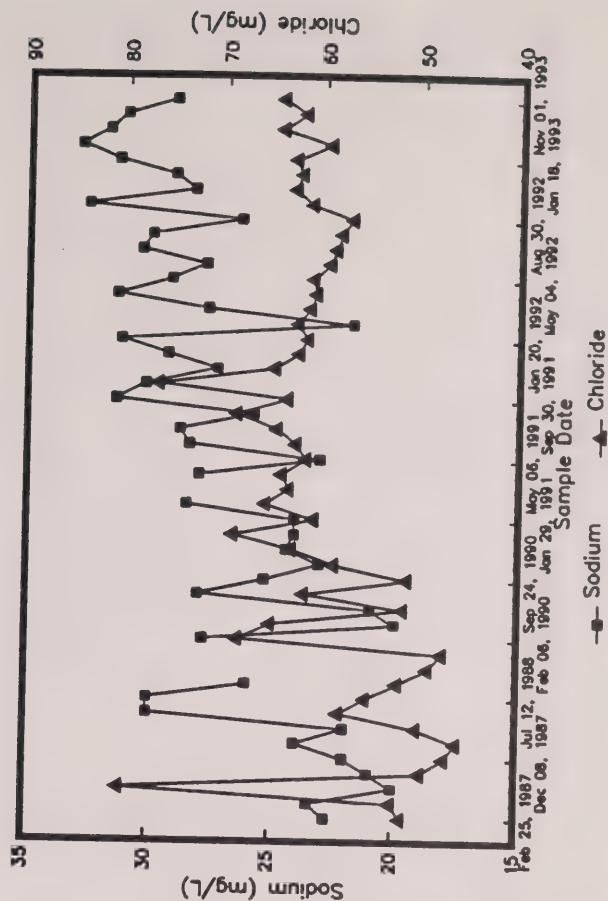
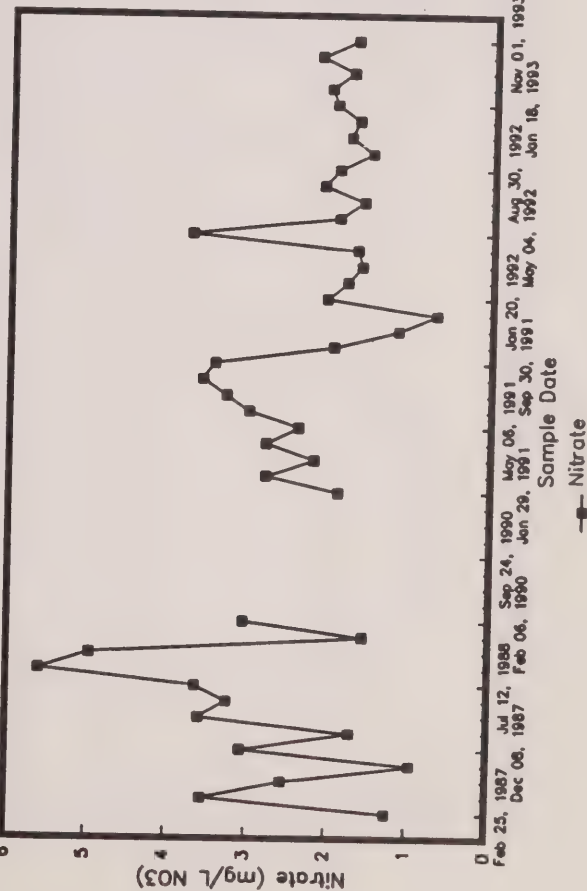
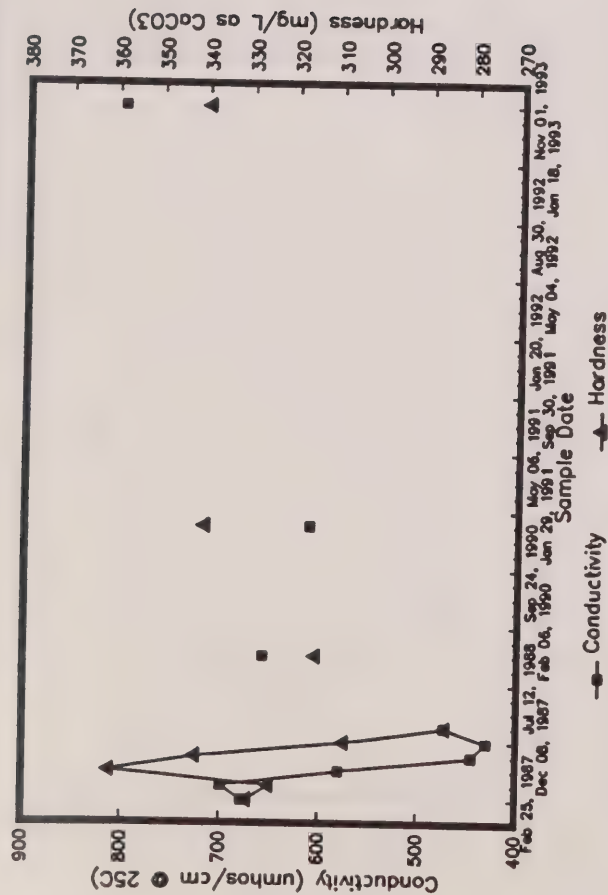


Town of Georgetown Municipal Well # 4A

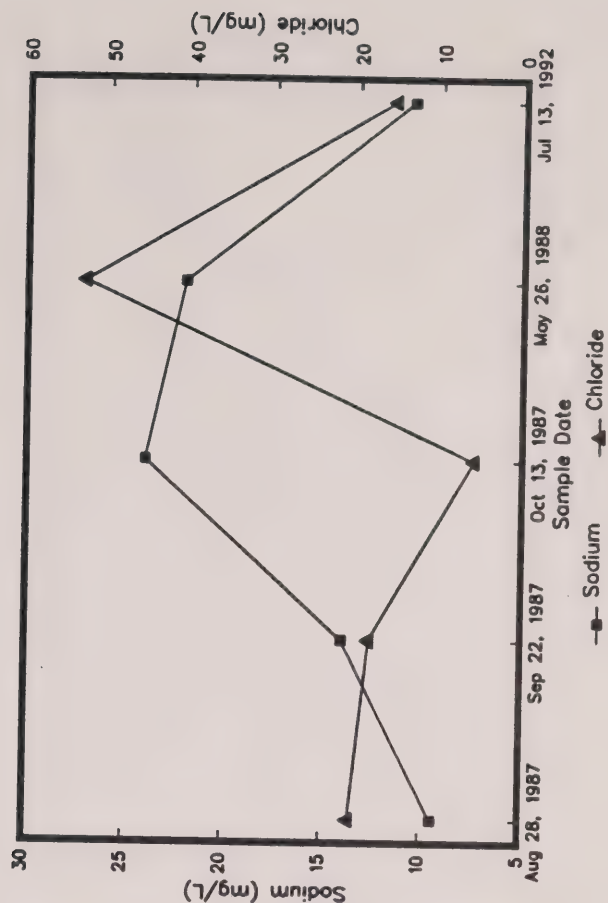
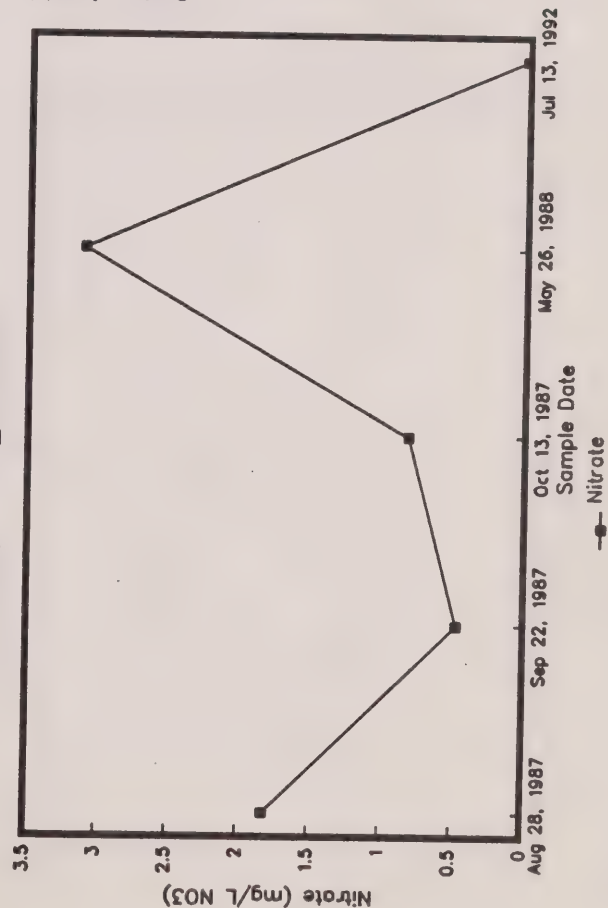
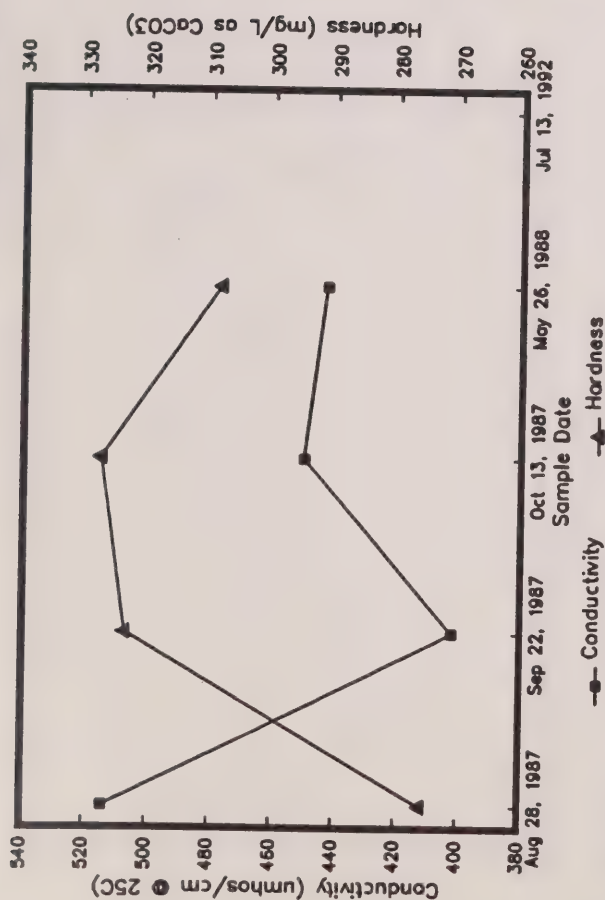
WATER QUALITY TRENDS 1989 - 1993



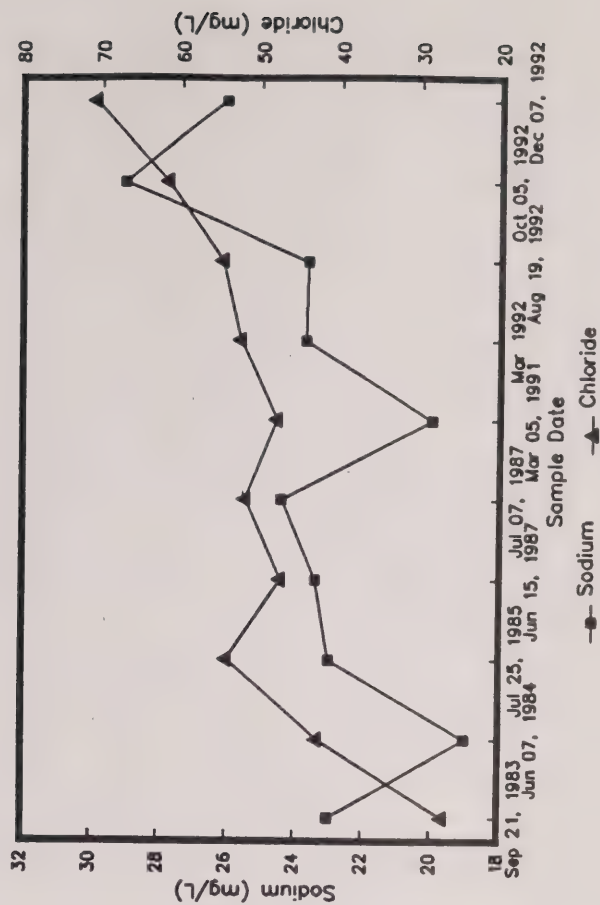
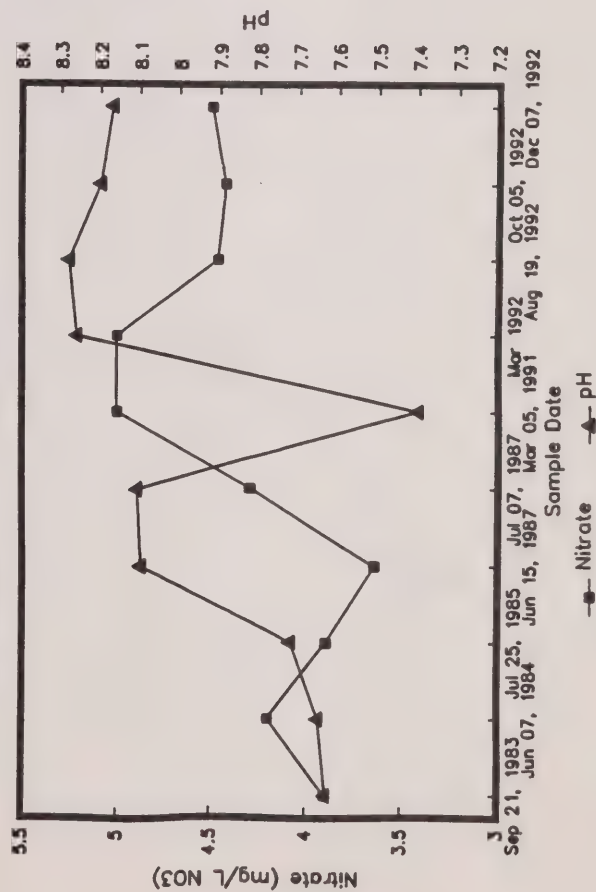
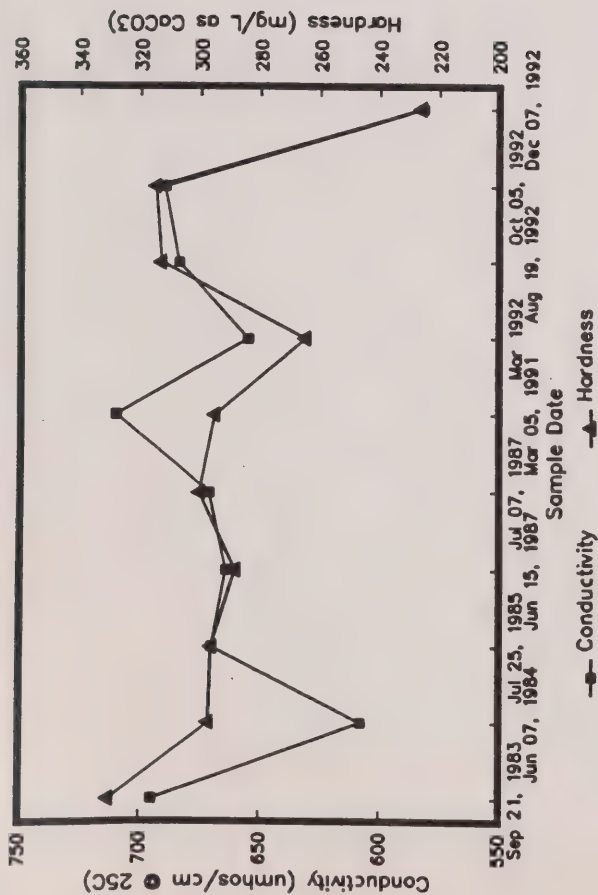
Town of Georgetown Municipal Well # 5 WATER QUALITY TRENDS 1987 - 1993



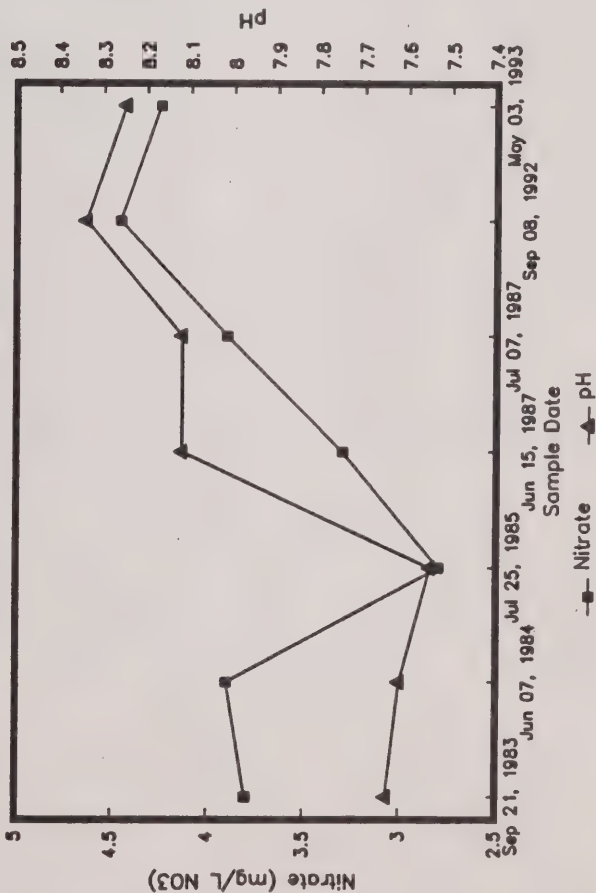
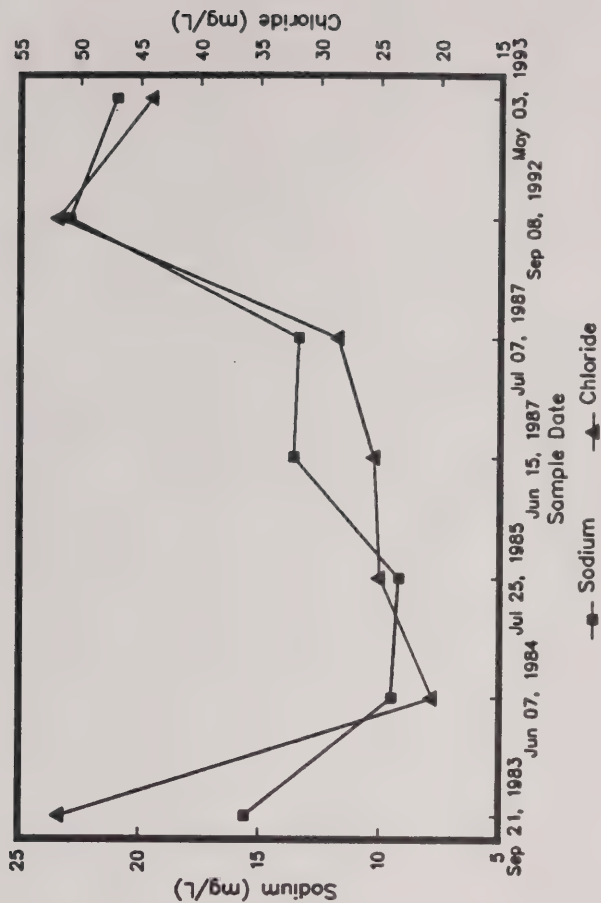
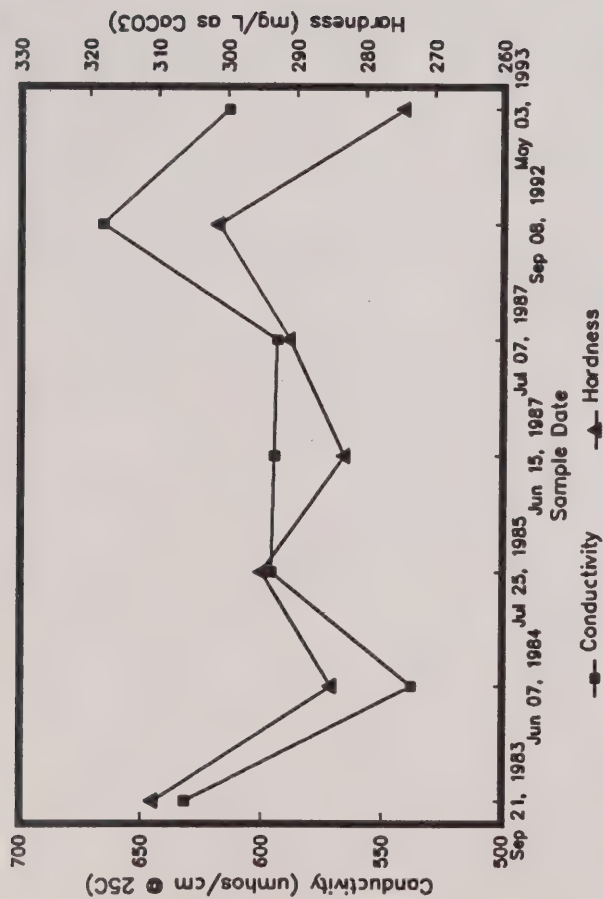
Town of Georgetown Municipal Well # 6 WATER QUALITY TRENDS 1987 - 1992



Town of Orangeville Municipal Well # 5 WATER QUALITY TRENDS 1983 - 1992



Town of Orangeville Municipal Well # 5A WATER QUALITY TRENDS 1983 - 1993



APPENDIX VII

**SUMMARY
OF
WATER TEMPERATURE, CHLORIDE
TOTAL NITRATE, AND TOTAL PHOSPHORUS
MEASURED AT VARIOUS WATER QUALITY STATIONS**

A SUMMARY OF CURRENT WATER QUALITY IN THE CREDIT RIVER WATERSHED

Water Temperature

Point source discharges from municipal sewage treatment plants as well as storm water runoff from urban areas can exert a warming effect on surface waters. Physical conditions such as the degree of shading over a particular reach of river, stream depth, flow velocity, and volume can also influence in-stream water temperatures.

Water temperatures at all the monitored sites exhibit strong natural seasonal variations and range from near freezing to above 20 °C. Most sites on the main branch of the Credit River show median temperatures of approximately 10 °C. Station 2 at the mouth of the Credit River shows a median of 7 °C, however, this value is biased because of the nature of the sampling strategy at this site. The median water temperature at Station 15 on the Erin Branch is 9.5 °C. Sites on the West Branch show medians of about 12 °C, while Station 16 on Fletcher's Creek shows the highest observed median water temperature of 15 °C.

Chlorides

Median chloride concentrations at all the monitored sites range from 29.7 mg/l to 193.0 mg/l. Generally, surface waters with concentrations of more than 20 mg/l reflect the effects of human activities. Sources of chloride in surface waters include road salt from major transportation corridors and urban areas as well as direct contributions from sewage treatment plants.

Station 19 upstream of Orangeville has a median chloride concentration of 31.9 mg/l. The median concentration increases substantially to 117.5 mg/l at Station 6, which is located downstream of the Orangeville sewage treatment plant. Observed concentrations are lower at Stations 24, 23 and 18 on the main Credit River. At Station 18, for example, the observed median chloride concentration is 47.5 mg/l. These reductions in median concentrations can be attributed to the increase in dilution waters from tributaries such as the Alton Branch.

Compared to all other monitored sites in the watershed, Station 15 on the Erin Branch shows the lowest median chloride concentration of 29.7 mg/l. Lower median concentrations on the order of 37 mg/l are observed further downstream at Stations 10 and 13 on the main Credit River. Again, the addition of sufficient dilution waters is responsible for the observed reductions.

The highest median chloride concentration of 193 mg/l is observed at Station 8 on Black Creek below the Acton sewage treatment plant. A median concentration of 111 mg/l is observed on the West Branch of the Credit River near Norval, just upstream of the confluence with the main branch. This level is attributed to chloride

contributions from the urban areas of Acton and Georgetown as well as to discharges from their respective sewage treatment plants.

A high median concentration of 150 mg/l is observed on Fletcher's Creek. Chloride concentrations increase at Stations 3, 17 and 2 on the main Credit River as a result of contributions from tributaries such as the West Branch and Fletcher's Creek as well as contributions from runoff generated in the large urban area that predominates the lower reach of the Credit River.

Total Nitrate

Total nitrate levels in surface waters in natural, pristine environments are generally less than 0.5 mg/l. Concentrations greater than 0.5 mg/l are generally indicative of impacts of human activities on surface waters. Typical sources of nitrate include nitrogen-based fertilizers, runoff from manure storage facilities, and discharges from sewage treatment plants.

Station 19 on the Credit River upstream of Orangeville has a median total nitrate concentration of 0.138 mg/l. This concentration increases to 1.730 mg/l at Station 6 downstream of Orangeville due to the discharge from the sewage treatment plant. The nitrate levels decrease at subsequent sites further downstream on the main Credit. Again this is attributed to the addition of dilution waters from tributaries along the course of the main branch. A median total nitrate concentration of 0.757 mg/l is observed at Station 13. There are no nitrate data available for the site on the Erin Branch.

The highest levels of nitrate (4.190 mg/l) are observed in Black Creek below the Acton sewage treatment plant and at Station 4 on the West Branch near Norval. The high nitrate levels observed in the West Branch have the effect of elevating levels at sites on the main Credit in the reach below the confluence. Similarly, runoff from the urban areas in the lower half of the watershed would have the same effect. The median nitrate concentration at station 16 on Fletcher's Creek is 1.240 mg/l, while the concentration at Station 2 near the mouth of the Credit River is 1.640 mg/l.

Total Phosphorus

Table 19 shows the summary statistics and PWQG violation frequencies at all sites for total phosphorus. Potential contributions of phosphorus to surface waters can originate from both point and non-point sources. Point sources include discharges from sewage treatment plants and from industrial and commercial operations. Non-point sources include runoff from agricultural areas, contributions from faulty septic systems, and storm water runoff.

Station 19 above Orangeville shows a median concentration of 0.024 mg/l with 25.3 percent of the observations exceeding the 0.030 mg/l phosphorus guideline. Station 6, the first site below Orangeville,

has a median total phosphorus concentration of 0.060 mg/l with 96.0 percent of the observations exceeding the guideline. The increase in the level of total phosphorus observed at this site is due to storm water runoff and waste discharges originating from Orangeville.

The next two Stations: 24 and 23 on the Credit River are also influenced by urban contributions from Orangeville. Median total phosphorus concentrations at these sites are on the order of 0.048 mg/l with about 86 to 90 percent of the observations exceeding the guideline.

A median concentration of 0.023 mg/l and a guideline violation frequency of 33.3 is observed at Station 18. These levels are similar to those observed at Station 19 upstream of Orangeville. It is likely that the Alton Branch of the Credit River contributes sufficient dilution water to lower the phosphorus concentrations at this site.

The Erin Branch of the Credit River shows a very low median phosphorus concentration of 0.014 mg/l. Only 7.7 percent of the observations exceed the guideline at this site. Levels this low are typically observed in watersheds with little or no human activities.

Sufficient volumes of good quality dilution water from tributaries such as the Erin Branch help to reduce phosphorus concentrations on the main branch. Stations 10 and 13 on the main Credit River show median concentrations of about 0.020 mg/l and guideline violation frequencies of about 30 percent. Phosphorus concentrations observed at these two sites are the lowest levels observed of all monitored sites on the Credit River proper.

Station 8 on Black Creek shows a median phosphorus concentration of 0.055 mg/l and a guideline violation frequency of 97.2 percent. Storm water runoff as well as discharge from Acton sewage treatment plant are responsible for these observed levels.

Station 22 on the West Branch of the Credit River near Georgetown shows a low median phosphorus concentration of 0.014 mg/l as well as a guideline violation frequency of 13.5 percent. Further downstream at Station 4, a median phosphorus concentration and guideline violation frequency of 0.029 mg/l and 47.4 percent are observed. This site is upstream of the confluence with the main Credit River and the levels observed reflect the contributions from storm water runoff and the sewage treatment plants of Acton and Georgetown.

Station 3 on the main branch of the Credit River below the confluence of the West Branch, and Station 17 further downstream on the Credit River, exhibit similar total phosphorus concentrations of about 0.021 to 0.023 mg/l. Just over 40 percent of the observations exceed the phosphorus guideline. The levels observed

at these sites are attributed to the contributions from the West Branch as well as storm water runoff from the urbanized areas in the lower reaches of the Credit River.

Station 16 on Fletcher's Creek shows a median total phosphorus concentration of 0.053 mg/l with a guideline violation frequency of 80 percent. Station 2 near the mouth of the Credit River has a median total phosphorus concentration of 0.030 mg/l and a guideline violation frequency of 44.4 percent. The increase in the median concentration at this site is attributed to runoff from the urban areas which predominate in the lower parts of the Credit River watershed.

Generally speaking, total phosphorus levels in the Credit River watershed are not as high as those observed at many other watersheds in southern Ontario.

PROVINCIAL WATER QUALITY MONITORING NETWORK
SUMMARY OF WATER TEMPERATURE TRENDS AT SITES IN THE CREDIT RIVER WATERSHED

NODE	STAD	PARM	TREND	PERCENT VARIATION DUE TO TREND	PERCENT VARIATION DUE TO SEASONAL	MEDIAN	COMMENTS
1	06007601902	FWTEMP	DECREASING	5.8	90.9	10.900	IT IS HARD TO EXPLAIN WHY THERE IS A DECREASING TREND AT THIS SITE. PERHAPS THERE IS A GREATER GROUND WATER CONTRIBU- TION OVER TIME AT THIS SITE. SEASONALITY IS AS EXPECTED. THERE IS HIGH LEVELS OBSERVED IN THE SUMMER MONTHS AND MUCH OF THE VARIATION IN THE TIME SERIES IS DUE TO SEASONALITY.
2	06007600602	FWTEMP	NOT SIGNIFICANT	5.8	87.5	10.000	NO SIGNIFICANT TREND IS OBSERVED FOR THE PERIOD OF RECORD BUT LOOKS LIKE LEVELS STARTED TO DECREASE IN THE EARLY 1970'S. IN 1977 THE TREND LINE STEPPED UP AND REMAINED LEVEL. THIS MAY BE DUE TO STP CONTRIBUTIONS. THE MEDIAN TEMPERATURE, HOWEVER IS CONSISTENT WITH THAT OBSERVED AT THE UPSTREAM SITE. SEASONALITY IS AS EXPECTED.
3	06007602402	FWTEMP	DECREASING	4.2	86.4	10.000	THIS SITE HAS A SHORT PERIOD OF RECORD THAT SHOWS A DECREASING TREND SINCE THE STATION STARTED IN 1982. THE MEDIAN TEMPERATURE IS SIMILAR TO THE 2 UPSTREAM STATIONS AND SEASONALITY IS AS EXPECTED.
4	06007602302	FWTEMP	DECREASING	5.5	89.6	10.750	THIS SITE HAS A DECREASING TREND THAT IS SIMILAR IN SHAPE TO THAT OBSERVED AT THE UPSTREAM STATION. THE MEDIAN CONCENTRATION IS ALSO SIMILAR AND SEASONALITY IS AS EXPECTED.
5	06007601802	FWTEMP	NOT SIGNIFICANT	11.1	91.3	10.000	NO SIGNIFICANT TREND. SEASONALITY AS EXPECTED. MEDIAN CONCENTRATION SIMILAR TO THE UPSTREAM STATIONS.
6	06007601502	FWTEMP	INCREASING	10.1	89.5	9.500	THIS SITE IS SHOWING A TREND TOWARDS WARMER TEMPERATURES. SEASONALITY IS EXPECTED BUT THE MEDIAN CONCENTRATION IS LOWER THEN WHAT IS OBSERVED AS OTHER SITES IN THE UPPER REACH OF THE WATERSHED.
7	06007601002	FWTEMP	INCREASING	18.8	92.5	9.750	AN INCREASING TREND IS OBSERVED WITH SEASONALITY AS EXPECTED. THE MEDIAN TEMPERATURE IS LOWER THAN THAT OBSERVED AT OTHER UPSTREAM CREDIT RIVER SITES LIKELY DUE TO THE ADDITION OF THE COLDER WATER FROM THE ERIN BRANCH.
8	06007601302	FWTEMP	NOT SIGNIFICANT	16.5	90.8	12.000	ALTHOUGH THE TREND IS POSITIVE, THE STATS INDICATE NO TREND

PROVINCIAL WATER QUALITY MONITORING NETWORK

SUMMARY OF WATER TEMPERATURE TRENDS AT SITES IN THE CREDIT RIVER WATERSHED

NODE	STAD	PARM	TREND	PERCENT VARIATION DUE TO TREND	PERCENT VARIATION DUE TO SEASONAL	MEDIAN	COMMENTS
8	06007601302	FUTEMP	NOT SIGNIFICANT	16.5	90.8	12.000	SIGNIFICANCE. THE SEASONALITY IS AS EXPECTED BUT THE MEDIAN TEMPERATURE IS HIGHER AT THIS SITE THAN OTHER SITES UPSTREAM. PERHAPS THIS REACH OF THE RIVER IS MORE EXPOSED TO SUNLIGHT MORE SO THAN OTHER UPSTREAM SITES.
9	06007600802	FUTEMP	INCREASING	12.9	89.6	12.000	INCREASING TREND OBSERVED. SEASONALITY AS EXPECTED. A HIGHER MEDIAN TEMPERATURE AT 12 C LIKELY DUE TO THE WARMING EFFECT OF THE STP DISCHARGE.
10	06007602202	FUTEMP	NOT SIGNIFICANT	9.5	91.3	12.500	THE SHORT PERIOD OF RECORD AT THIS SITE SHOWS NO TREND. THE SEASONALITY IS AS EXPECTED AND THE MEDIAN TEMPERATURE OF 12.5 C IS AGAIN LIKELY DUE TO THE STP DISCHARGE.
11	06007600402	FUTEMP	NOT SIGNIFICANT	13.1	91.2	12.500	THERE IS NO SIGNIFICANT TREND OBSERVED AT THIS SITE. SEASONALITY IS AS EXPECTED AND THE MEDIAN TEMPERATURE AT THIS SITE IS SIMILAR TO THAT OBSERVED AT THE 2 U/S SITES.
12	06007600302	FUTEMP	NOT SIGNIFICANT	13.8	91.2	11.000	NO SIGNIFICANT TREND. SEASONALITY AS EXPECTED. MEDIAN TEMPERATURE LOWER THAN THAT UPSTREAM STATIONS.
13	06007601702	FUTEMP	NOT SIGNIFICANT	13.4	91.2	9.500	NO SIGNIFICANT TREND. SEASONALITY AS EXPECTED. MEDIAN TEMPERATURE LOWER THAN THAT AT SITE 3.
14	06007601602	FUTEMP	NOT SIGNIFICANT	13.7	91.4	15.000	NO SIGNIFICANT TREND OBSERVED. SEASONALITY AS EXPECTED. MEDIAN TEMPERATURE THE WARMEST OF ALL SITES AT 15.0 C. THIS COULD BE DUE TO SIZE OF THE CREEK, THE EXPOSURE TO SUN AND POTENTIAL URBAN CONTRIBUTIONS.
15	06007600202	FUTEMP	NOT SIGNIFICANT	15.0	91.2	7.000	NO SIGNIFICANT TREND OBSERVED. SEASONALITY IS AS EXPECTED. THE MEDIAN TEMPERATURE RESULTS ARE MIS-LEADING BECAUSE MORE SAMPLES ARE COLLECTED AT THIS SITE DURING THE SPRING FRESHER WHEN WATER TEMPERATURES ARE COLD.

PROVINCIAL WATER QUALITY MONITORING NETWORK
SUMMARY OF CHLORIDE TRENDS AT SITES IN THE CREDIT RIVER WATERSHED

NODE	STAD	PARM	TREND	PERCENT VARIATION DUE TO TREND	PERCENT VARIATION DUE TO SEASONAL	MEDIAN	COMMENTS
1	06007601902	CLIDUR	INCREASING	93.5	74.7	31.950	INCREASE IN TREND STARTED IN 1984. STRONG SEASONALITY WITH HIGH LEVELS IN THE WINTER MONTHS AND LOWER CONCENTRATIONS IN THE SUMMER MONTHS LIKE WHAT IS EXPECTED DUE TO ROAD SALTING.
2	06007600602	CLIDUR	INCREASING	74.9	11.0	117.500	TREND INCREASE STARTED IN ABOUT 1970 AND IS LIKELY RELATED TO THE ORANGVILLE STP INPUT. THE CLASSIC SEASONALITY PLOT APPEARS TO BE DAMPENED BY THE POINT SOURCE DISCHARGE.
3	06007602402	CLIDUR	INCREASING	52.9	15.9	105.000	SHORT PERIOD OF RECORD STARTING IN 1982. TREND APPEARS TO INCREASE IN ABOUT 1988. SEASONALITY PLOT STILL APPEARS TO BE INFLUENCED BY THE STP DISCHARGE.
4	06007602302	CLIDUR	INCREASING	59.9	17.8	101.500	SHORT PERIOD OF RECORD STARTING IN 1979. INCREASING TREND EVIDENT FOR THE ENTIRE PERIOD BUT A JUMP DOES TAKE PLACE IN 1987. SEASONALITY IS STILL WEAK AS A RESULT OF THE STP INFLUENCE. CONCENTRATION STILL HIGH AS WELL FOR THE SAME REASONS.
5	06007601802	CLIDUR	INCREASING	75.5	20.2	47.500	INCREASING TREND SINCE 1975 BUT AGAIN JUMPS IN ABOUT 1987. SEASONALITY PLOT STILL AFFECTED BY THE STP DISCHARGE. THE MEDIAN CONCENTRATION IS LOWER AT THIS SITE LIKELY DUE THE CLEAN WATER CONTRIBUTIONS COMING FROM THE ALTON BRANCH.
6	06007601502	CLIDUR	INCREASING	86.7	7.3	29.700	INCREASING TRENDS OBSERVED FROM 1975 TO 1981. IT LEVELED OFF AND AGAIN STARTED TO INCREASE IN 1987. SEASONALITY IS VERY WEAK PERHAPS SUGGESTING THE PRISTINE NATURE OF THE ERIN BRANCH. THE MEDIAN CONCENTRATION IS OBSERVED TO BE THE LOWEST OF ALL MONITORED SITES IN THE WATERSHED.
7	06007601002	CLIDUR	INCREASING	90.5	37.8	37.100	THIS SITE GENERALLY SHOWS A STEADILY INCREASING TREND SINCE 1973. MORE OF A CLASSIC SEASONAL PLOT SHOWING HIGHER LEVELS IN THE WINTER AND LOW CONCENTRATIONS IN THE SUMMER. THE CONCENTRATION IS LOWER THAN THE PREVIOUS UPSTREAM SITE (018) AGAIN LIKELY DUE TO DILUTION FROM THE ERIN BRANCH.
8	06007601302	CLIDUR	INCREASING	88.7	30.1	36.550	TREND AND SEASONALITY PLOTS ARE VERY SIMILAR TO THE U/S SITE (010) AS IS THE MEDIAN CONCENTRATION. THESE TWO SITES ARE

PROVINCIAL WATER QUALITY MONITORING NETWORK
SUMMARY OF CHLORIDE TRENDS AT SITES IN THE CREDIT RIVER WATERSHED

NODE	STAD	PARM	TREND	PERCENT VARIATION DUE TO TREND	PERCENT VARIATION DUE TO SEASONAL	MEDIAN	COMMENTS
8	06007601302	CLIDUR	INCREASING	88.7	30.1	36.550	VERY CLOSE AND PERHAPS ONE SHOULD BE DISCONTINUED.
9	06007600802	CLIDUR	NOT SIGNIFICANT	17.7	23.0	193.000	THIS IS A SMALL STREAM WITH LITTLE DILUTION CAPACITY THAT RECEIVES A SIGNIFICANT STP CONTRIBUTION. THE AFFECTS OF THE STP ARE EVIDENT IN THAT THERE IS NO TREND PLUS CONSIDERABLE VARIATION IN THE QUARTILE LIMITS ABOUT THE WEAK SEASONAL PLOT. THE CONCENTRATION IS THE HIGHEST OBSERVED IN THE W/S.
10	06007602202	CLIDUR	NOT SIGNIFICANT	15.0	21.1	74.450	THIS SITE SHOWS SIMILAR CHARACTERISTICS TO STATION 008. THE GEORGETOWN STP DISCHARGE AGAIN HAS AN IMPACT ON WHAT HAPPENS IN STREAM. FIRST THERE IS NO SIGNIFICANT TREND. THE SEASONAL PLOT IS INFLUENCED BY THE DISCHARGE AND THE MEDIAN CONCENTRATION IS ALSO ELEVATED. IT IS NOT AS HIGH AS WHAT IS OBSERVED AT STATION 008 LIKELY DUE TO THE FACT THAT THE RECEIVER HAS A LARGER ASSIMILATIVE CAPACITY.
11	06007600402	CLIDUR	INCREASING	44.5	28.0	111.000	THIS SITE REFLECTS THE COMBINED CONTRIBUTIONS FROM BOTH STP. A TREND IS OBSERVED IN THE TIME SERIES - STEADILY INCREASING SINCE 1965. SEASONALITY PLOT AGAIN INFLUENCED BY THE STP DISCHARGES AND A MEDIAN CONCENTRATION ALSO SHOWING A BALANCE FROM THE TWO DISCHARGES.
12	06007600302	CLIDUR	INCREASING	80.4	22.6	53.650	THIS SITE SHOWS A STEADY INCREASE IN CHLORIDE LEVELS SINCE 1965. ALTHOUGH THE SEASONALITY PLOT IS STILL WEAK, IT APPEARS TO BE TAKING ON THE EXPECTED SHAPE FOR AN URBANIZED AREA SUBJECT TO WINTER ROAD SALTING. THE MEDIAN CONC. IS HIGHER THAN THE PREVIOUS UPSTREAM STATION ON THE CREDIT. OBVIOUSLY THE WEST BRANCH IS MAKING A SIGNIFICANT LOAD CONTRIBUTION TO ELEVATE THE LEVELS AT STATION 003.
13	06007601702	CLIDUR	INCREASING	63.1	42.0	52.600	THIS SITE HAS A SHORT PERIOD OF RECORD SHOWING A STEADILY INCREASING TREND SINCE 1975. THE SEASONALITY PLOT AGAIN SHOWS HIGHER CONCENTRATIONS IN THE WINTER MONTHS AND LOWER LEVELS IN THE SUMMER. THE MEDIAN CONCENTRATION IS SIMILAR TO THE LEVEL OBSERVED UPSTREAM AT STATION 003.
14	06007601602	CLIDUR	INCREASING	20.0	47.3	150.000	ALTHOUGH THIS SITE SHOWS INCREASING TREND, THE PERIOD FROM

PROVINCIAL WATER QUALITY MONITORING NETWORK
SUMMARY OF CHLORIDE TRENDS AT SITES IN THE CREDIT RIVER WATERSHED

NODE ----	STAD ----	PARM ----	TREND -----	PERCENT VARIATION		MEDIAN	COMMENTS
				DU TO TREND -----	DU TO SEASONAL -----		
14	06007601602	CLIDUR	INCREASING	20.0	47.3	150.000	1975 TO 1988 WAS LEVEL OR UNCHANGING. IN 1989 THE TREND INCREASED LIKELY DUE TO DEVELOPMENT IN THE HEAD WATER AREAS ORIGINATING IN BRAMPTON. THE SEASONALLY PLOT STRONGLY SUGGESTS AN URBAN AREA AS DOES THE MEDIAN CONCENTRATION AT 150 MG/L.
15	06007600202	CLIDUR	INCREASING	78.3	25.9	65.600	THIS IS THE MOST DOWNSTREAM SITE LOCATED IN THE CITY OF MISSISSAUGA. THERE IS A STEADILY INCREASING TREND SINCE THE STATION STARTED IN 1965. THE SEASONALITY PLOT SHOWS HIGHER LEVELS IN THE WINTER AND LOWER LEVELS IN THE FALL SUGGESTING THE IMPACTS OF ROAD SALTIN IN AN URBAN AREA. THE MEDIAN CONCENTRATION IS HIGHER THAN THE UPSTREAM SITE (017) LIKELY DUE TO THE CONTRIBUION FROM THE URBAN AREAS IN BETWEEN AND FROM FLETCHERS CREEK.

PROVINCIAL WATER QUALITY MONITORING NETWORK
SUMMARY OF TOTAL NITRATE TRENDS AT SITES IN THE CREDIT RIVER WATERSHED

MODE	STAD	PARM	TREND	PERCENT VARIATION DUE TO TREND	PERCENT VARIATION DUE TO SEASONAL	MEDIAN	COMMENTS
1	06007601902	NNOTFR	NOT SIGNIFICANT	11.2	43.7	.138	THERE IS NO SIGNIFICANT TREND FOR THE ENTIRE PERIOD OF RECORD BUT SINCE ABOUT 1986 THE TREND DOES APPEAR TO BE INCREASING. THE SEASONALITY PLOT IS TYPICAL OF WHAT IS OBSERVED AT MANY SITES. THAT IS, HIGHER LEVELS RECORDED IN THE RUNOFF PERIOD AND LOWER LEVELS IN THE SUMMER PERHAPS WHEN UPTAKE BY AQUATIC PLANTS IS AT A MAXIMUM. THE MEDIAN CONCENTRATION AT THIS SITE IS THE LOWEST OF ALL MONITORED SITES AT .138 MG/L.
2	06007600602	NNOTFR	INCREASING	31.7	49.9	1.730	INCREASING TREND. CONSIDERABLE VARIATION IN THE TIME SERIES DUE BOTH TO TREND AND SEASONALITY. THE SEASONAL PLOT SHOWS LOWER LEVELS IN THE SUMMER WITH MORE VARIATION IN THE IGR AT THAT TIME. THE MEDIAN CONCENTRATION IS CONSIDERABLY HIGHER THAN THE UPSTREAM STATION AT 1.73 MG/L THUS REFLECTING THE STP CONTRIBUTION.
3	06007602402	NNOTFR	NOT SIGNIFICANT	30.8	56.8	1.535	THIS SITE HAS A SHORTER PERIOD OF RECORD THAN THE UPSTREAM SITE. THE TREND PLOT; HOWEVER, FOR THE CORRESPONDING TIME PERIOD ARE SIMILAR AS IS THE SHAPE OF THE SEASONALITY PLOT.
4	06007602302	NNOTFR	NOT SIGNIFICANT	33.7	71.8	1.250	THE COMMENTS AT THIS SITE ARE THE SAME AS THOSE WRITTEN FOR SITE 24. IT APPEARS THAT SITES 6, 24 AND 23 SHOW BASICALLY THE SAME INFORMATION.
5	06007601802	NNOTFR	NOT SIGNIFICANT	23.3	82.7	.785	NO SIGNIFICANT TREND IS OBSERVED AT THIS SITE ALTHOUGH SEASONAL PLOT IS SIMILAR TO SITE 6. THERE IS CONSIDERABLE VARIATION IN THE DATA SERIES DUE TO SEASONALITY. THE MEDIAN CONCENTRATION IS ALSO LOWER LIKELY DUE TO THE DILUTION WATER FROM THE ALTON BRANCH.
6	06007601502	NNOTFR	INCREASING	23.3	17.3	.000	INSUFFICIENT TIME SERIES DATA FOR ANALYSIS.
7	06007601002	NNOTFR	NOT SIGNIFICANT	46.0	78.5	.887	INSUFFICIENT DATA FOR TIME SERIES ANALYSIS.
8	06007601302	NNOTFR	INCREASING	39.3	85.0	.757	INCREASING TREND. CLASSIC SEASONAL PLOT WITH CONSIDERABLE VARIATION IN THE TIME SERIES DUE TO SEASONALITY.

PROVINCIAL WATER QUALITY MONITORING NETWORK

SUMMARY OF TOTAL NITRATE TRENDS AT SITES IN THE CREDIT RIVER WATERSHED

NODE	STAD	PARM	TREND	PERCENT VARIATION DUE TO TREND	PERCENT VARIATION DUE TO SEASONAL	MEDIAN	COMMENTS
9	06007600802	NNOTFR	NOT SIGNIFICANT	21.3	30.3	4.110	THE PLOT SHOWS NO SIGNIFICANT TREND. THE MEDIAN CONC. IS HIGH AT 4.11 MG/L. AGAIN THE STP AND LAGOON DISCHARGE ARE SUSPECTED AS BEING RESPONSIBLE. THE SEASONAL PLOT ALSO APPEARS TO BE AFFECTED BY THE STP DISCHARGE.
10	06007602202	NNOTFR	NOT SIGNIFICANT	11.5	20.3	2.255	THERE IS NO SIGNIFICANT TREND AND LITTLE VARIATION IN THE TIME SERIES DUE TO SEASONALITY. THE STP DISCHARGE IS SUSPECTED OF CONTRIBUTING TO THE SHAPE OF THE PLOTS.
11	06007600402	NNOTFR	INCREASING	63.0	30.5	4.190	THIS SITE DISPLAYS AN INCREASING TREND. THE SITE ALSO HAS THE LONGEST PERIOD OF RECORD OF THE 3 SITES ON THE WEST BRANCH. THE SEASONALITY PLOT IS SIMILAR TO THAT OBSERVED ON BLACK CREEK D/S OF ACTON. THE MEDIAN CONCENTRATION IS THE HIGHEST OF ALL MONITORED SITES AT 4.19 MG/L.
12	06007600302	NNOTFR	INCREASING	73.0	58.5	1.465	THERE IS CONSIDERABLE VARIATION IN THE TIME SERIES DUE TO TREND. THE SHAPE OF THE TREND PLOT IS VERY SIMILAR TO THAT OBSERVED AT SITE 4 ON THE WEST BRANCH. THE SEASONALITY PLOT HOWEVER IS MORE SIMILAR TO THAT OBSERVED ON THE MAIN BRANCH OF THE CREDIT AT SITE 13. THE MEDIAN IS CONSIDERABLY LOWER THAN WHAT IS OBSERVED AT SITE 4 SUGGESTING THAT THE MAIN BRANCH OF THE CREDIT HAS A DILUTION EFFECT FOR NNOTFR
13	06007601702	NNOTFR	INCREASING	21.4	73.8	1.180	THE TREND PLOT SHOWS AN INCREASE BUT THERE ISN'T AS MUCH VARIATION IN THE TIME SERIES DUE TO TREND. THE PLOT IS SIMILAR TO THAT OBSERVED AT SITE 13 ON THE MAIN BRANCH. THE SAME OBSERVATIONS APPLY FOR THE SEASONALITY PLOT. THERE IS CONSIDERABLE VARIATION DUE TO SEASONALITY AND THE PLOT TAKES ON THE CLASSIC SHAPE.
14	06007601602	NNOTFR	INCREASING	24.3	50.7	1.240	INCREASING TREND. VARIATION DUE TO TREND NOT AS STRONG AS THE SEASONAL VARIATION. SEASONAL PLOT TAKES ON THE CLASSIC SHAPE. MEDIAN NOT THAT HIGH.
15	06007600202	NNOTFR	INCREASING	51.7	57.8	1.640	INCREASING TREND WITH CONSIDERABLE VARIATION IN THE TIME SERIES DUE TO TREND. HIGHER NITRATES OBSERVED IN THE SPRING AND FALL AND LOWER LEVELS IN THE SUMMER. CONSIDERABLE

PROVINCIAL WATER QUALITY MONITORING NETWORK
SUMMARY OF TOTAL NITRATE TRENDS AT SITES IN THE CREDIT RIVER WATERSHED

NODE	STAD	PARM	TREND	PERCENT VARIATION		MEDIAN	COMMENTS
				DUE TO TREND	DUE TO SEASONAL		
15	06007600202	NNOTFR	INCREASING	51.7	57.8	1.640	VARIATION DUE TO SEASONALITY. GENERALLY SPEAKING THE NITRATE LEVELS IN THE WATERSHED ARE LOWER THAN LEVELS AT MANY SITES IN SOUTHERN ONTARIO. HIGHER LEVELS ATTRIBUTED TO STP DISCHARGES.

PROVINCIAL WATER QUALITY MONITORING NETWORK
SUMMARY OF TOTAL PHOSPHORUS TRENDS AT SITES IN THE CREDIT RIVER WATERSHED

MODE	STATION	PARAMETER	TREND	PERCENT VARIATION DUE TO TREND	PERCENT VARIATION DUE TO SEASONAL	MEDIAN	COMMENTS
1	06007601902	PPUT	DECREASING	21.3	23.9	.024	THE DECREASE IN TREND AT THIS OCCURRED FROM 1976 TO 1982. SINCE 1982 THERE HAS BEEN NO CHANGE IN THE TREND. THE SEASONALITY PLOT SHOWS THAT HIGHER LEVELS OCCUR IN THE SUMMER MONTHS. THERE IS NO REAL EVIDENCE OF HIGHER LEVELS IN THE FRESHET PERIOD. AGRICULTURAL CONTRIBUTIONS ABOVE THIS SITE ARE LIKELY MINIMAL. THE MEDIAN CONCENTRATION IS BELOW THE GUIDELINE AT .024 MG/L AND ONLY 25.3 PERCENT OF THE OBSERVATIONS EXCEED THE GUIDELINE.
2	06007600602	PPUT	DECREASING	83.3	36.0	.060	THIS SITE HAS A DECREASING TREND WITH A STEP DROP IN 1976. THIS COULD BE DUE TO IMPROVEMENTS AT THE STP OR CHANGES IN THE LEGISLATION. SINCE 1976 TREND HAS CONTINUED TO DECREASE THE SEASONALITY PLOT SHOWS HIGHER PPUT LEVELS IN THE SUMMER MONTHS LIKELY DUE TO INSUFFICIENT DILUTION TO HANDLE THE STP DISCHARGE. THE CONCENTRATION HAS ALSO INCREASED TO .060 MG/L AND 96 PERCENT OF THE OBSERVATIONS EXCEED THE OBJECTIVE.
3	06007602402	PPUT	NOT SIGNIFICANT	7.6	31.4	.047	THIS SITE HAS A SMALL PERIOD OF RECORD STARTING IN 1982 AND NO SIGNIFICANT TREND OBSERVED. THE PLOT APPEARS SIMILAR TO THE PERIOD OF RECORD AT THE U/S STATION AS DOES THE SEASONAL PLOT. THE MEDIAN CONCENTRATION HAS DROPPED TO .047 MG/L AND 90.1 PERCENT OF THE OBSERVATIONS EXCEED THE GUIDELINE. THIS PROBABLY THE RESULT OF MORE DILUTION WATER AT SITE 024.
4	06007602302	PPUT	DECREASING	23.2	46.5	.048	THE TREND PLOT OBSERVED AT THIS SITE IS VIRTUALLY IDENTICAL TO THE ONE OBSERVED AT SITE 006. THIS SITE ALSO SHOWS THE SAME TREND PLOT AS SITE 024 SINCE 1982. THE SEASONALITY PLOTS ARE SIMILAR. THE MEDIAN CONCENTRATION IS .048 MG/L AND 86.8 PERCENT OF OBSERVATIONS ARE ABOVE THE GUIDELINE. THIS SITE IS SHOWS THE SAME AS SITE 24 WRT PPUT. ONE SITE COULD PROBABLY BE DISCONTINUED.
5	06007601802	PPUT	DECREASING	55.9	43.7	.023	THIS SITE SHOWS A NICE STEADILY DECREASING TREND SINCE 1975. THE SHAPE OF THE SEASONAL PLOT IS SIMILAR TO THE PLOT AT THE UPSTREAM STATIONS. THE MEDIAN CONCENTRATION HAS DROPPED TO

PROVINCIAL WATER QUALITY MONITORING NETWORK
SUMMARY OF TOTAL PHOSPHORUS TRENDS AT SITES IN THE CREDIT RIVER WATERSHED

MODE	STAD	PARM	TREND	PERCENT VARIATION DUE TO TREND	PERCENT VARIATION DUE TO SEASONAL	MEDIAN	COMMENTS
5	06007601802	PPUT	DECREASING	55.9	43.7	.023	.023 MG/L WITH 33.3 PERCENT IF THE OBSERVATIONS ABOVE THE GUIDELINE. AGAIN THE DILUTION WATER FROM THE ALTON BRANCH IS LIKELY RESPONSIBLE FOR THIS REDUCTION.
6	06007601502	PPUT	NOT SIGNIFICANT	20.9	21.6	.015	THE FACT THAT THERE IS NO SIGNIFICANT TREND OBSERVED AT THIS SITE PLUS A LOW MEDIAN CONCENTRATION AND ONLY 7.7 PERCENT OF THE OBSERVATIONS ABOVE THE GUIDELINE SUGGEST THAT THIS SITE IS RELATIVELY UN-IMPACTED BY ANTHROPOGENIC ACTIVITY. THE SEASONAL PLOT IS WEAK WITH A VERY SLIGHT INCREASE IN LEVELS DURING THE SPRING FRESHEST. THEY MAY BE SMALL AMOUNT OF AGRICULTURAL ACTIVITY UPSTREAM.
7	06007601002	PPUT	DECREASING	26.6	17.4	.020	A STEADILY DECREASING TREND SINCE 1973 BUT NOTHING DRAMATIC. THE SEASONALITY PLOT IS ALSO WEAK BUT THERE IS A SLIGHT INCREASE IN THE LEVELS IN THE FRESHET PERIOD SUGGESTING A NON-POINT SOURCE CONTRIBUTION. THE MEDIAN CONCENTRATION IS AGAIN LOWER THAN THAT OBSERVED AT THE U/S SITE LIKELY DUE TO THE ADDITION OF MORE DILUTION WATER AT THIS SITE. ONLY 30.6 PERCENT OF THE OBSERVATIONS EXCEED THE GUIDELINE.
8	06007601302	PPUT	DECREASING	22.0	17.3	.018	THE TREND AND SEASONALITY PLOTS ARE VERY SIMILAR TO THOSE OBSERVED AT THE UPSTREAM SITE (010). ONLY 30.6 PERCENT OF THE OBSERVATIONS EXCEED THE GUIDELINE. PERHAPS ONE OF SITE 10 AND 13 SHOULD BE DISCONTINUED.
9	06007600802	PPUT	DECREASING	77.3	13.2	.055	A STEADILY DECREASING TREND IS OBSERVED WITH A STEP DECREASE OCCURRING IN 1978. THERE IS VIRTUALLY NO SEASONALITY OBSERVED LIKELY DUE TO THE IMPACT OF THE STP DISCHARGE. THE MEDIAN IS ELEVATED DUE TO THE LACK OF DILUTION WATER IN BLACK CREEK AND 97.2 PERCENT OF THE OBSERVATIONS EXCEED THE PMQG.
10	06007602202	PPUT	DECREASING	29.4	11.2	.014	THIS IS A SHORTER PERIOD OF RECORD SHOWING A DECREASING TREND SINCE 1979. A STEP DROP OCCURRED IN 1989 AND THIS CORRESPONDS TO A LOADING REDUCTION OBSERVED IN THE STP PERFORMANCE DATA. THERE IS WEAK SEASONALITY WITH CONSIDERABLE VARIATION OBSERVED IN THE IQR. THE MEDIAN

PROVINCIAL WATER QUALITY MONITORING NETWORK
SUMMARY OF TOTAL PHOSPHORUS TRENDS AT SITES IN THE CREDIT RIVER WATERSHED

NODE	STAD	PARM	TREND	PERCENT VARIATION DUE TO TREND	PERCENT VARIATION DUE TO SEASONAL	MEDIAN	COMMENTS
10	06007602202	PPUT	DECREASING	29.4	11.2	.014	CONCENTRATION IS WELL BELOW THE OBJECTIVE AND ONLY 13.5 PERCENT OF OBSERVATIONS EXCEED THE PMQG. THERE MAY BE SUFFICIENT DILUTION WATER AT THIS SITE.
11	06007600402	PPUT	DECREASING	74.6	13.1	.029	THIS SITE HAS SHOWN DRAMATIC IMPROVEMENTS IN PPUT LEVELS SINCE THE START OF THE STATION IN 1965. LEVELS OF ABOUT 1 MG/L WERE OBSERVED IN THE LATE 60'S AND EARLY 70'S DROPPING TO A MEDIAN CONCENTRATION OF .029 MG/L FOR THE PERIOD 1990 TO 1993. THESE IMPROVEMENTS ARE ATTRIBUTED TO STP ENHANCEMENTS THAT HAVE TAKEN PLACE OVER THE YEARS. THE SEASONALITY PLOT IS WEAK WITH A LOT OF VARIATION IN THE IQR.
12	06007600302	PPUT	DECREASING	70.1	11.0	.023	THE TREND PLOT AT THIS SITE IS VERY SIMILAR TO THAT OBSERVED FOR THE WEST BRANCH AT STATION 4 SUGGESTING THE CONSIDERABLE IMPACT OF INFLUENCE THE WEST BRANCH HAS ON THE MAIN CREDIT AT SITE 3. THE SEASONALITY PLOTS ARE ALSO COMPARABLE. THE MEDIAN CONCENTRATION AT SITE 3 IS LOWER THAN SITE 4 INDICATING THE DILUTION EFFECT FROM THE MAIN BRANCH ABOVE NORVAL.
13	06007601702	PPUT	DECREASING	31.2	15.1	.021	THE TREND PLOT AND SEASONALITY PLOT OBSERVED AT THIS SITE IS VERY SIMILAR TO THOSE OBSERVED AT STATION 3 UPSTREAM FOR THE CORRESPONDING PERIODS OF RECORD. THE MEDIAN CONCENTRATION IS ALSO COMPARABLE AND 40.5 PERCENT OF THE OBSERVATIONS ARE ABOVE THE PMQG.
14	06007601602	PPUT	NOT SIGNIFICANT	8.2	13.3	.053	THERE IS NO SIGNIFICANT TREND OBSERVED AT THIS SITE SINCE STARTUP IN 1975. THE VARIATION DUE TO TREND IS VERY LOW AS IS THE VARIATION DUE TO SEASONAL. THE SEASONAL PLOT SUGGESTS HIGHER LEVELS IN THE SUMMER LIKELY DUE TO INSUFFICIENT DILUTION. THE MEDIAN CONCENTRATION IS .053 MG/L AND 80 PERCENT OF THE OBSERVATIONS ARE ABOVE THE PMQG.
15	06007600202	PPUT	DECREASING	63.3	13.8	.030	THE TREND PLOT IS VERY SIMILAR TO THAT OBSERVED AT SITE 3 ON THE MAIN CREDIT AND AT SITE 4 ON THE WEST BRANCH. THE CONTRIBUTIONS FROM THE STP HAVE A SIGNIFICANT IMPACT ON THE SHAPE OF THE TREND PLOT. THE SEASONALITY PLOT IS STARTING

PROVINCIAL WATER QUALITY MONITORING NETWORK
SUMMARY OF TOTAL PHOSPHORUS TRENDS AT SITES IN THE CREDIT RIVER WATERSHED

NODE ----	STAD ----	PARM ----	TREND ----	PERCENT VARIATION		MEDIAN	COMMENTS -----
				DUE TO TREND	DUE TO SEASONAL		
15	06007600202	PPUT	DECREASING	63.3	13.8	.030	TO SHOW HIGHER LEVELS IN THE SPRING FRESHET. THE MEDIAN CONCENTRATION IS .030 MG/L AND 44.4 PERCENT OF THE OBSERVATIONS ARE ABOVE THE PQQG. THE STP'S APPEAR TO HAVE A SIGNIFICANT IMPACT ON THE INSTREAM CONCENTRATION YET THE LOADING SUMMARY SUGGEST THAT THE TOTAL STP LOAD CONTRIBUTION IS NEGLIGIBLE COMPARED TO THE TOTAL BASIS PPUT LOAD. GENERALLY MEDIAN CONCENTRATIONS IN THE CREDIT ARE LOW COMPARED TO OTHER STREAMS IN SOUTHERN ONTARIO.

APPENDIX VIII

SURFACE WATER QUALITY TREND ANALYSES

QUALITY TRENDS OBSERVED AT VARIOUS WATER QUALITY STATIONS

Water Temperature Trends

The trend analysis indicates that most of the variations in the water temperature time series at all monitored sites can be attributed to the seasonal component. Very little of the variations in the time series is attributed to actual trend or change over time. Of the 15 sites monitored, 9 show no significant trend.

Station 19 above Orangeville and Stations 24 and 23 below Orangeville on the main Credit River show decreasing water temperature trends. Station 15 on the Erin Branch, Station 14 on the Credit river, and Station 8 on Black Creek below Acton show increasing water temperature trends.

Chloride Trends

Thirteen of the 15 monitored sites in the study area exhibit increasing trends. Although these sites generally exhibit steadily increasing trends over the long term, most sites also show a stepped up and sometimes dramatic increases in the trend line starting in the mid to late 1980's. This is most likely due to increased urbanization.

Station 8 downstream of the Acton sewage treatment plant on Black Creek and Station 22 on the West Branch near Georgetown show no significant chloride trends although both sites are influenced by discharges from municipal point sources.

Total Nitrate Trends

Only 13 of the 15 monitored sites in the study area have sufficient periods of record suitable for trend analysis. Of the 13 sites, 7 show increasing total nitrate trends, while the remaining 6 sites show no significant trends.

Station 19 upstream of Orangeville does not show a significant trend for most of the record, but since about 1986 there appears to be a general upward trend in the nitrate levels. Station 6 downstream of Orangeville shows an increasing nitrate trend. Stations 24, 23 and 18 further downstream on the main Credit River all show trends that are not significant. It should be noted that stations 24 and 23 have rather short periods of record for appropriate trend analysis. Station 13 on the main branch shows an increasing nitrate trend.

Station 8 on Black Creek and Station 22 on the West Branch do not show significant nitrate trends. The point source discharges from the sewage treatment plants likely attenuate any potential trend response at these sites. Station 4 near Norval has a long period of record and does show a significant increase in total nitrate

trend. All the other sites on the lower reach of the Credit (Stations 3, 17 and 2) as well as Station 16 on Fletcher's Creek show increasing total nitrate trends.

Total Phosphorus Trends

A decreasing phosphorus trend is observed at 12 of the 15 monitored sites. Of the three sites that show no significant trend, station 24 has a short a period of record starting only in 1982. Since 1982, however, this site does not show any significant trends for total phosphorus.

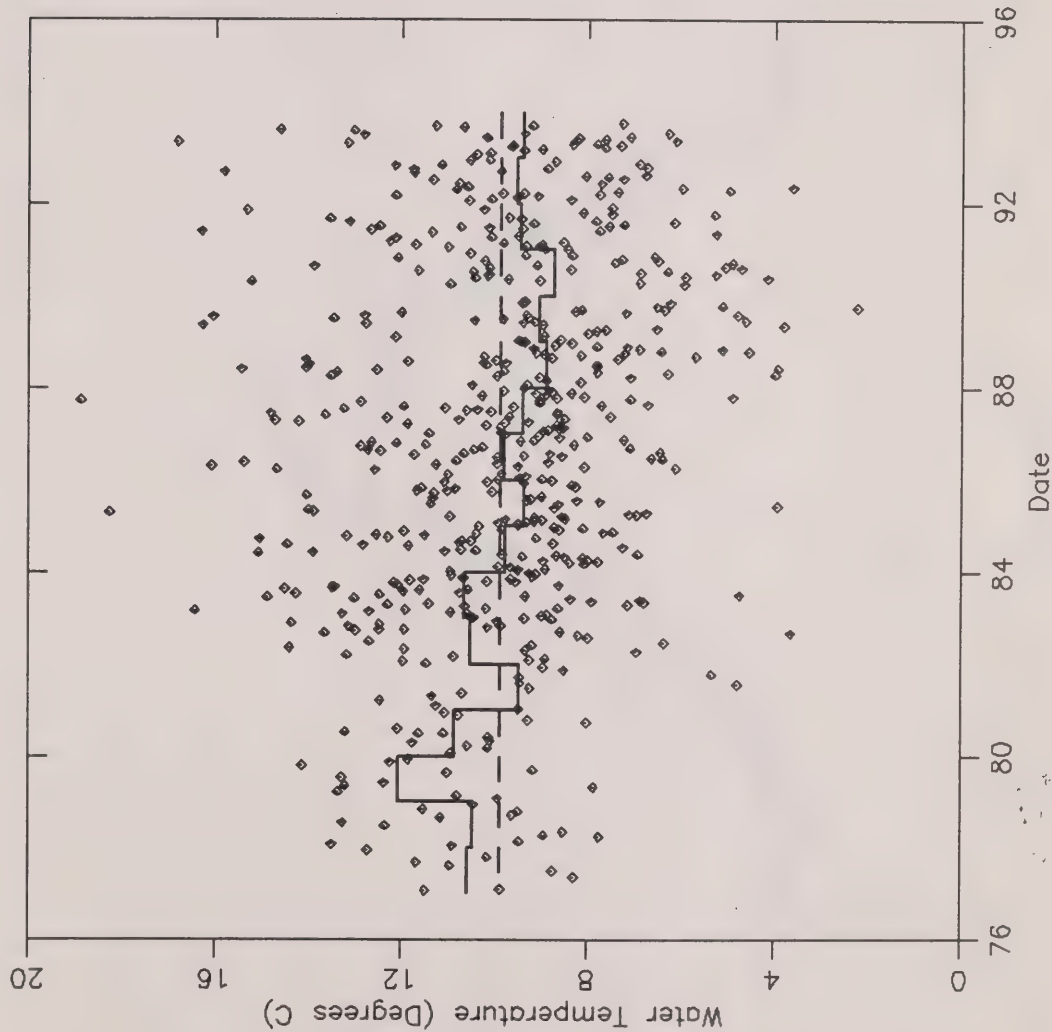
Station 15 shows very good water quality and there is likely very little land use activity in the sub-watershed, which accounts for the absence of any significant trend.

Station 16 also shows no significant trend suggesting that land use activity upstream has not changed substantially to cause dramatic changes in water quality in Fletcher's Creek with regards to total phosphorus.

TRENDS IN DE-SEASONALIZED DATA SERIES

Water Temperature (Degrees C)

Credit R. at Southern Dam of Orangeville Reservoir



Run #2: 6 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Annual median
-- Mean annual median
= 9.869

Maximum trend @ 1979 = 12.046
Minimum trend @ 1990 = 8.709
Trend range = 3.337

Observations = 522
Series begins @ JAN 26 1977
Series ends @ OCT 4 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

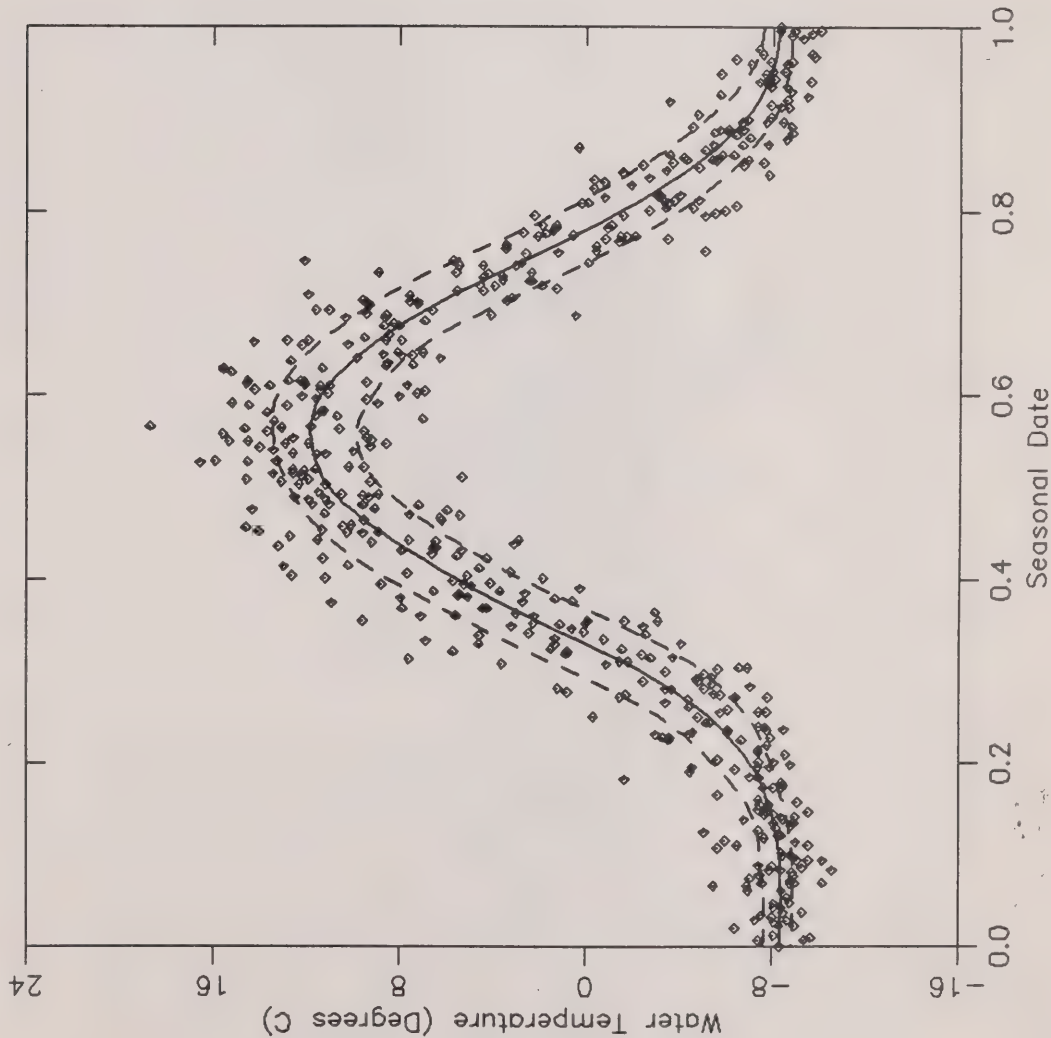
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = -0.716
p(RHO) = 0.001 dof = 15
% Variation due to trend = 5.8

Data file: TEMP019.FTM
Parameter: FWTEMP
Site: 06007601902

RELATIVE SEASONALITY IN DE-TRENDED SERIES

Water Temperature (Degrees C)

Credit R. at Southern Dam of Orangeville Reservoir



Run #2: 6 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JUL 24
Seasonal Min @ JAN 19
Seasonal Amplitude = 20.2

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 522
Series begins @ JAN 26 1977
Series ends @ OCT 4 1993

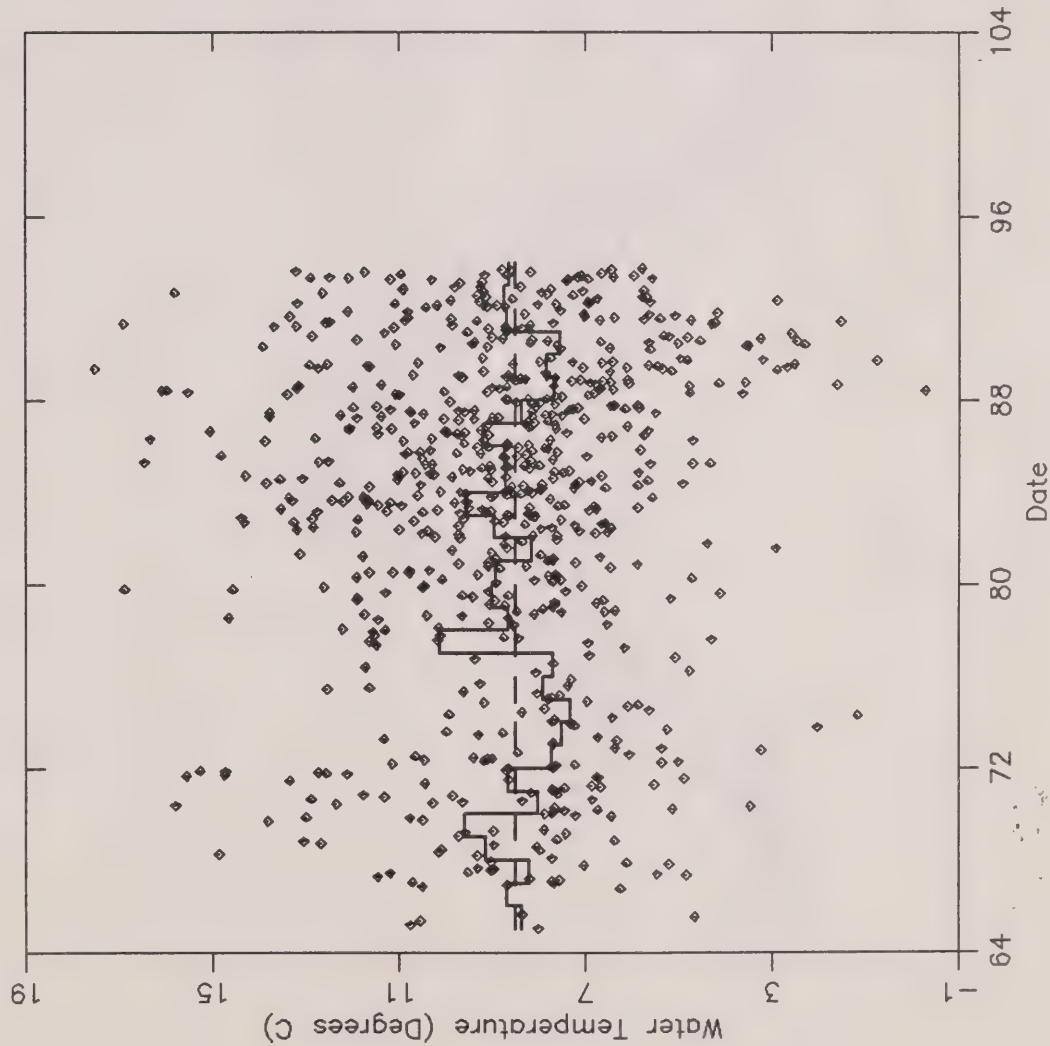
% Variation due to seasonal = 90.9

Data file: TEMP019.FTM
Parameter: FWTEMP
Site: 06007601902

TRENDS IN DE-SEASONALIZED DATA SERIES

Water Temperature (Degrees C)

Credit R. at Hwy. 10, d/s Orangeville STP



Run #2: 2 FAR OUTLIERS DELETED
Run date: December 8, 1993
pgm = TRX

— Annual median
- - - Mean annual median
= 8.488

Maximum trend @ 1977 = 10.123
Minimum trend @ 1974 = 7.316
Trend range = 2.807

Observations = 718
Series begins @ JAN 19 1965
Series ends @ OCT 4 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

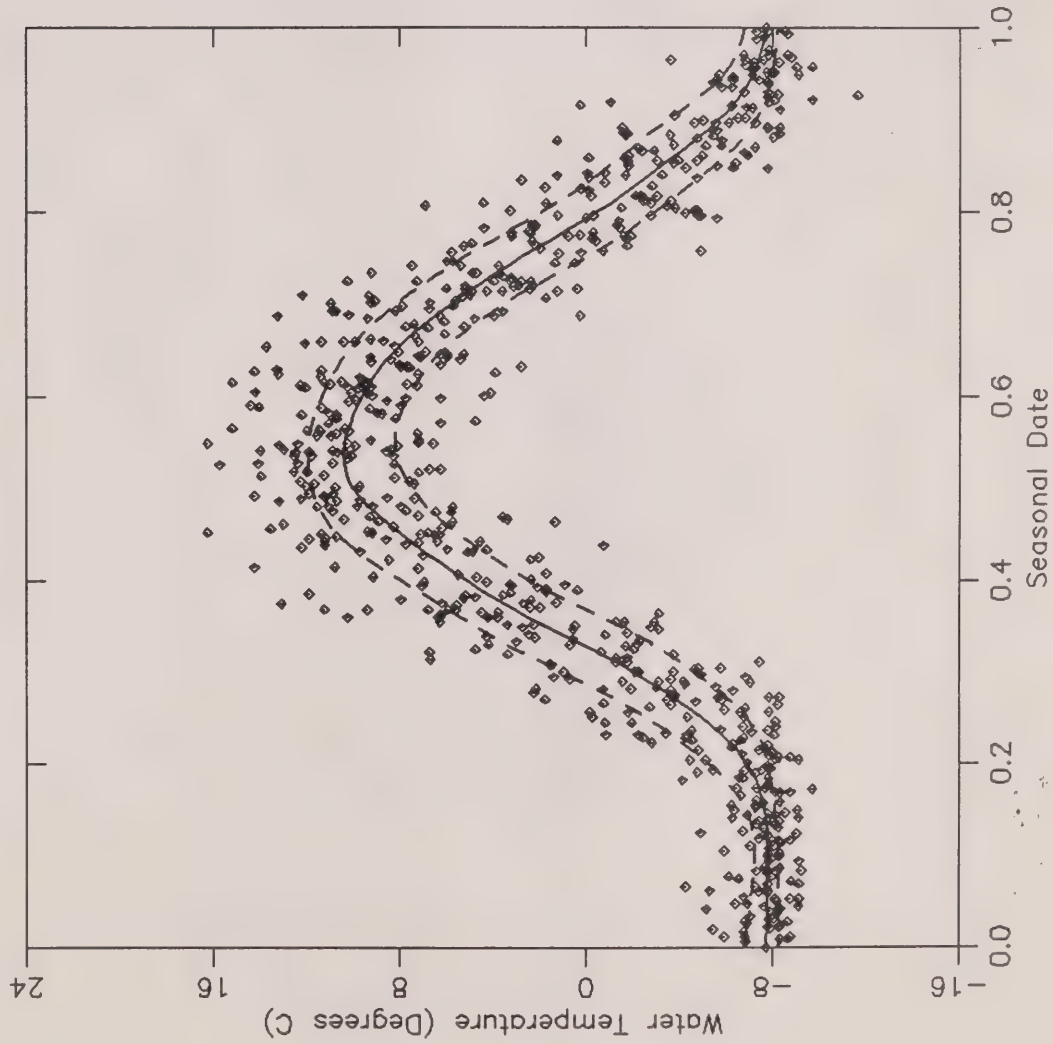
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.016
p(RHO) = 0.933 dof = 27
% Variation due to trend = 5.8

Data file: TEMP006.FTM
Parameter: FWTEMP
Site: 06007600602

RELATIVE SEASONALITY IN DE-TRENDED SERIES

Water Temperature (Degrees C)

Credit R. at Hwy. 10, d/s Orangeville STP



Run #2: 2 FAR OUTLIERS DELETED
Run date: December 8, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JUL 17
Seasonal Min @ JAN 30
Seasonal Amplitude = 18.2
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 718
Series begins @ JAN 19 1965
Series ends @ OCT 4 1993

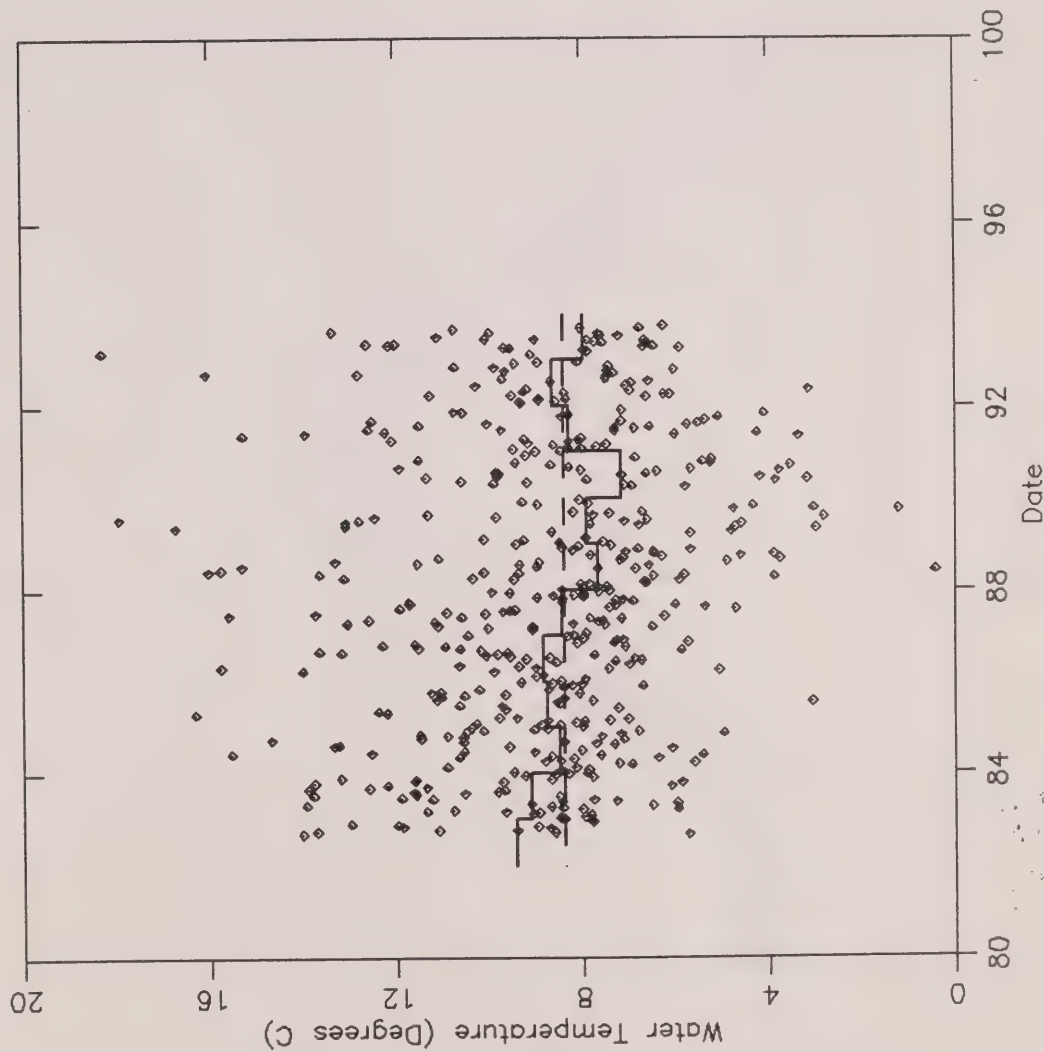
% Variation due to seasonal = 87.5

Data file: TEMP006.FTM
Parameter: FWTEMP
Site: 06007600602

TRENDS IN DE-SEASONALIZED DATA SERIES

Water Temperature (Degrees C)

Credit R. at Hwy. 10 2nd Bridge, below Orangeville



Run #2: 2 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Annual median
-- Mean annual median
= 8.377

Maximum trend @ 1982 = 9.411
Minimum trend @ 1990 = 7.149
Trend range = 2.262

Observations = 454
Series begins @ SEP 8 1982
Series ends @ OCT 4 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

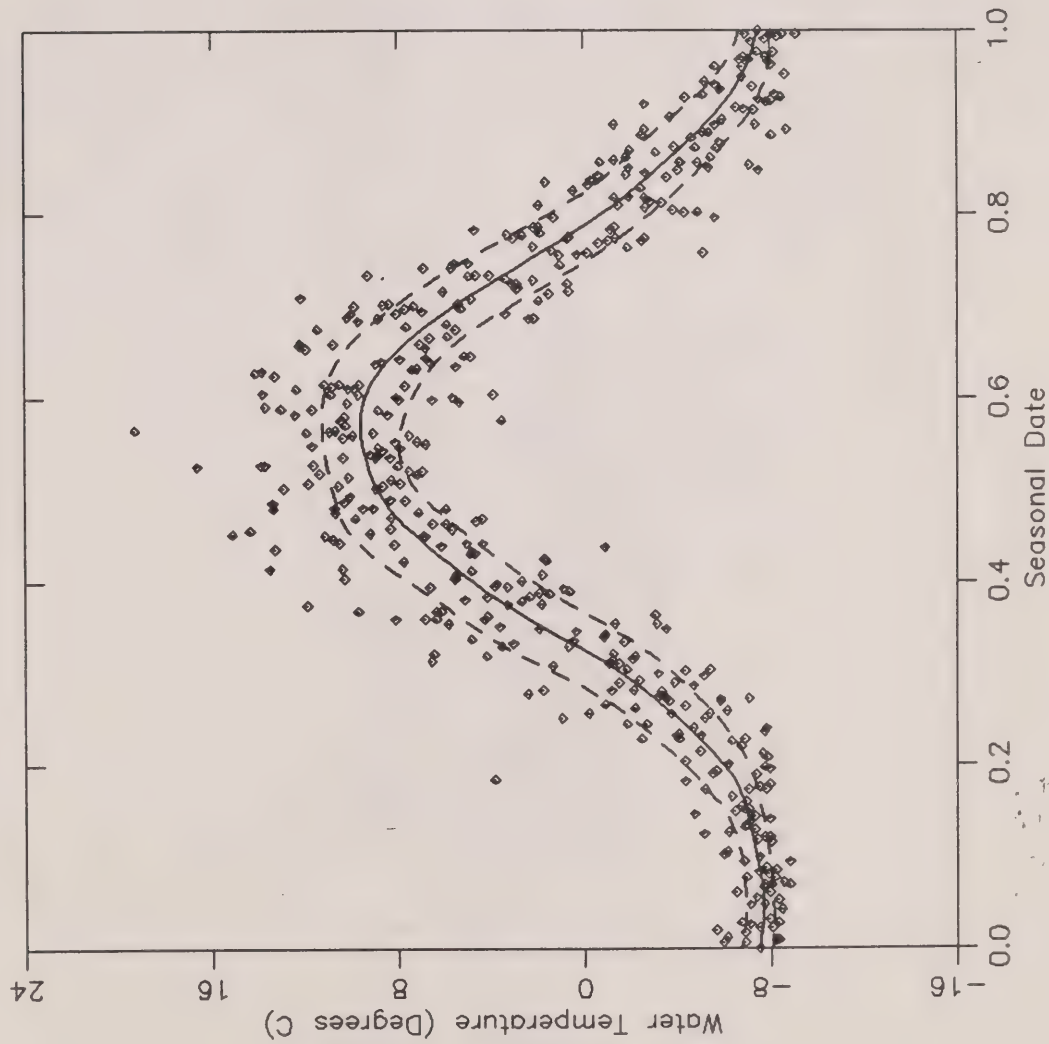
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = -0.678
p(RHO) = 0.015 dof = 10
% Variation due to trend = 4.2

Data file: TEMPO24.FTM
Parameter: FWTEMP
Site: 06007602402

RELATIVE SEASONALITY IN DE-TRENDED SERIES

Water Temperature (Degrees C)

Credit R. at Hwy. 10 2nd Bridge, below Orangeville



Run #2: 2 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JUL 28
Seasonal Min @ JAN 15
Seasonal Amplitude = 17.2

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 454
Series begins @ SEP 8 1982
Series ends @ OCT 4 1993

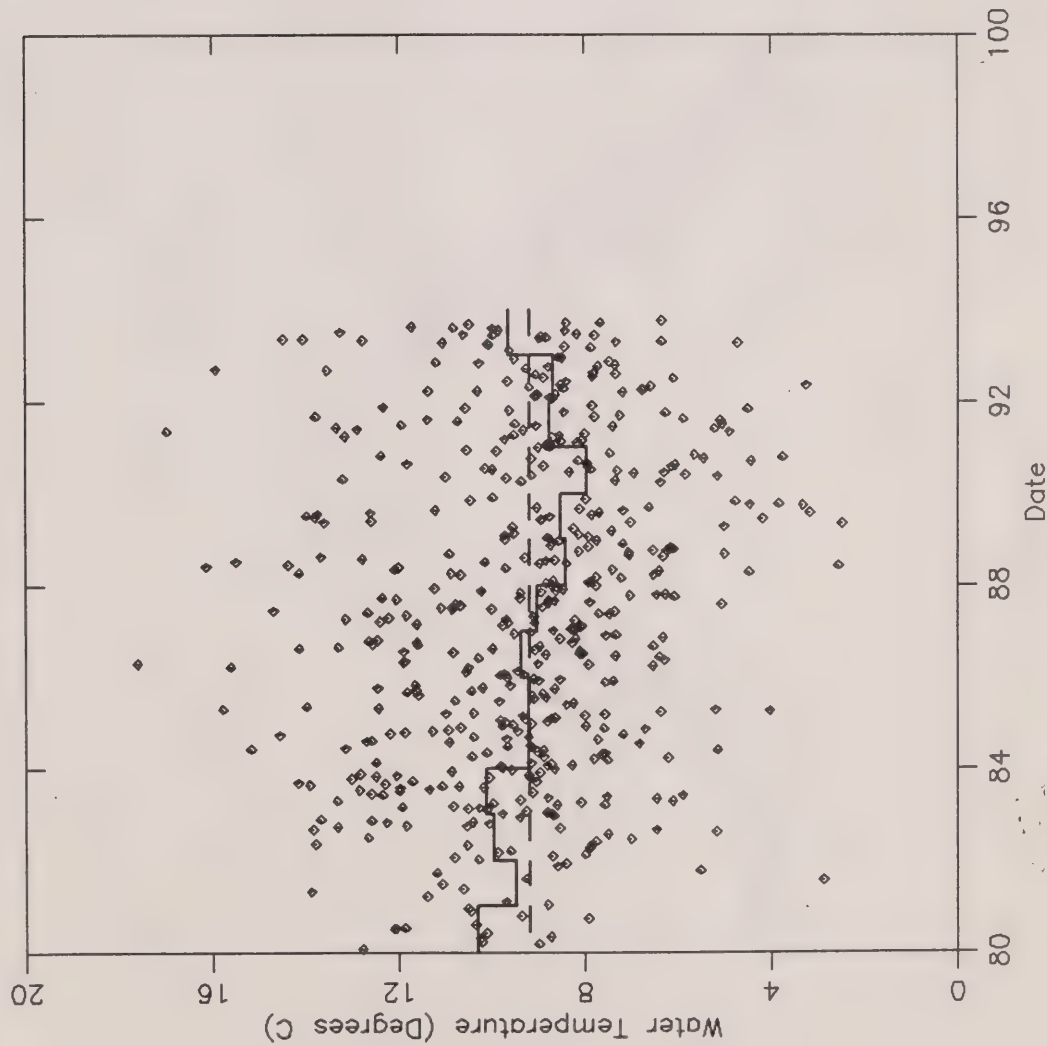
% Variation due to seasonal = 86.4

Data file: TEMP024.FTM
Parameter: FWTEMP
Site: 06007602402

TRENDS IN DE-SEASONALIZED DATA SERIES

Water Temperature (Degrees C)

Credit R. at Melville



Run #2: 3 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Annual median
- - Mean annual median
= 9.176

Maximum trend @ 1980 = 10.292
Minimum trend @ 1990 = 7.937
Trend range = 2.356

Observations = 497
Series begins @ JAN 31 1980
Series ends @ OCT 4 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

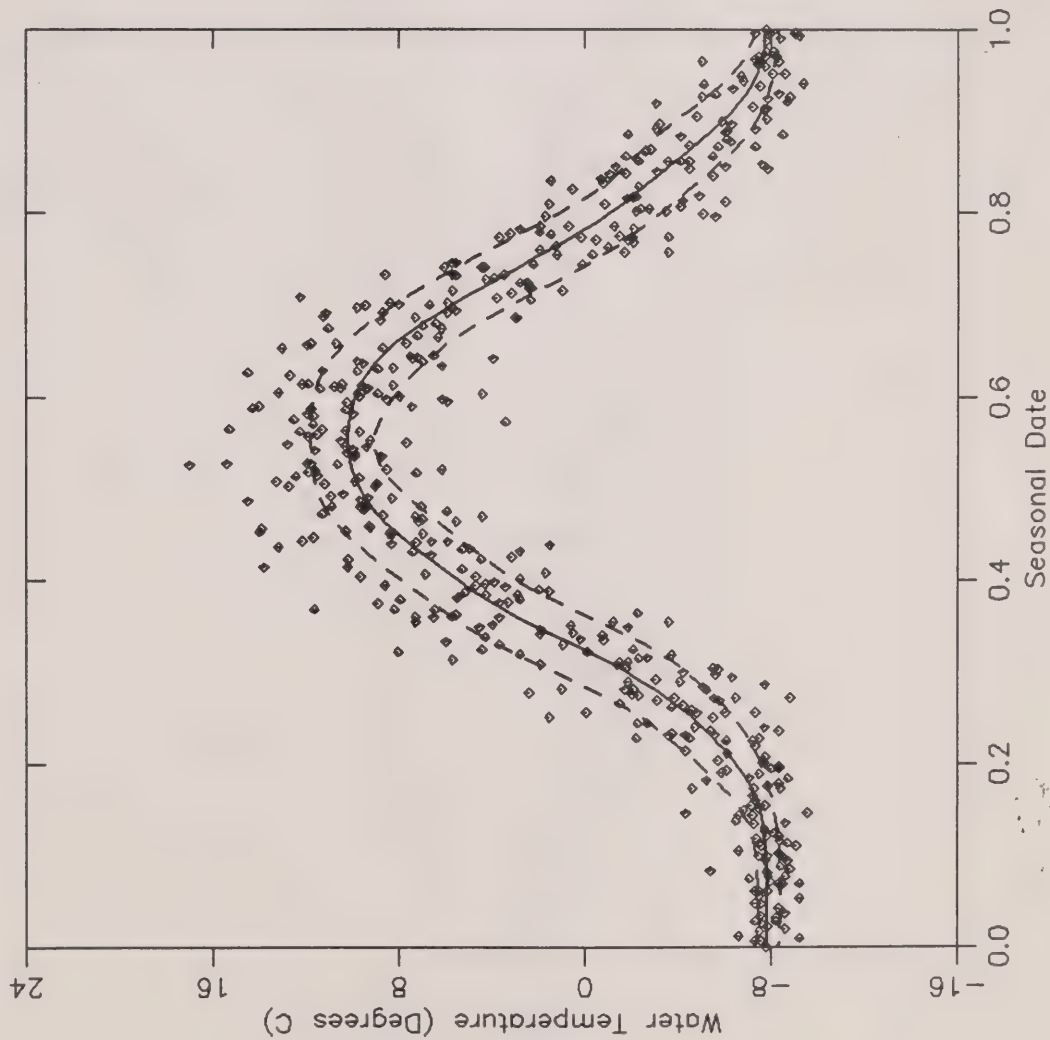
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = -0.648
p(RHO) = 0.012 dof = 12
% Variation due to trend = 5.5

Data file: TEMPO23.FTM
Parameter: FWTEMP
Site: 06007602302

RELATIVE SEASONALITY IN DE-TRENDED SERIES

Water Temperature (Degrees C)

Credit R. at Melville



Run #2: 3 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JUL 24
Seasonal Min @ JAN 19
Seasonal Amplitude = 18.0

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 497
Series begins @ JAN 31 1980
Series ends @ OCT 4 1993

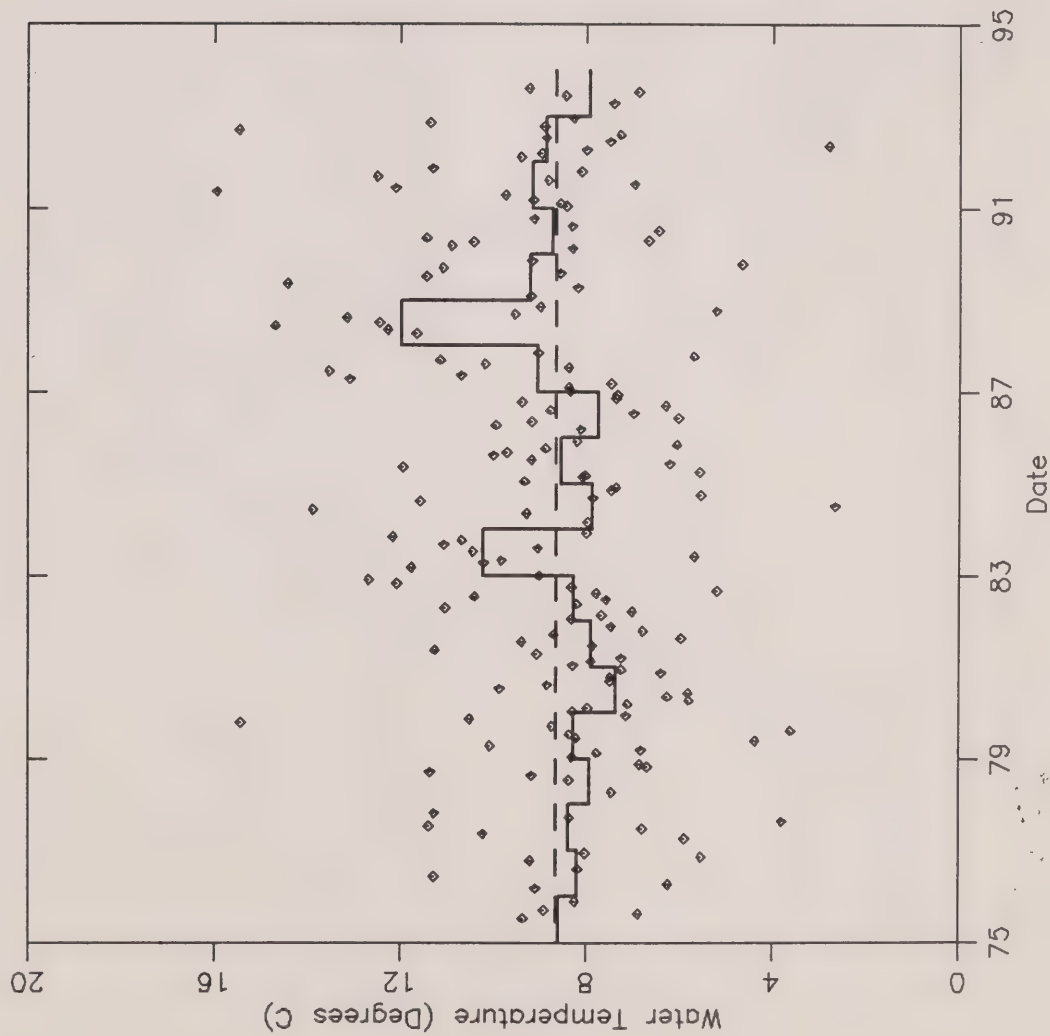
% Variation due to seasonal = 89.6

Data file: TEMP023.FTM
Parameter: FWTEMP
Site: 06007602302

TRENDS IN DE-SEASONALIZED DATA SERIES

Water Temperature (Degrees C)

Credit R. at 20th Side Rd., Caledon Twp.



Run #2: 1 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Annual median
-- Mean annual median
= 8.635

Maximum trend @ 1988 = 11.964
Minimum trend @ 1980 = 7.364
Trend range = 4.600

Observations = 174
Series begins @ JUL 17 1975
Series ends @ AUG 12 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

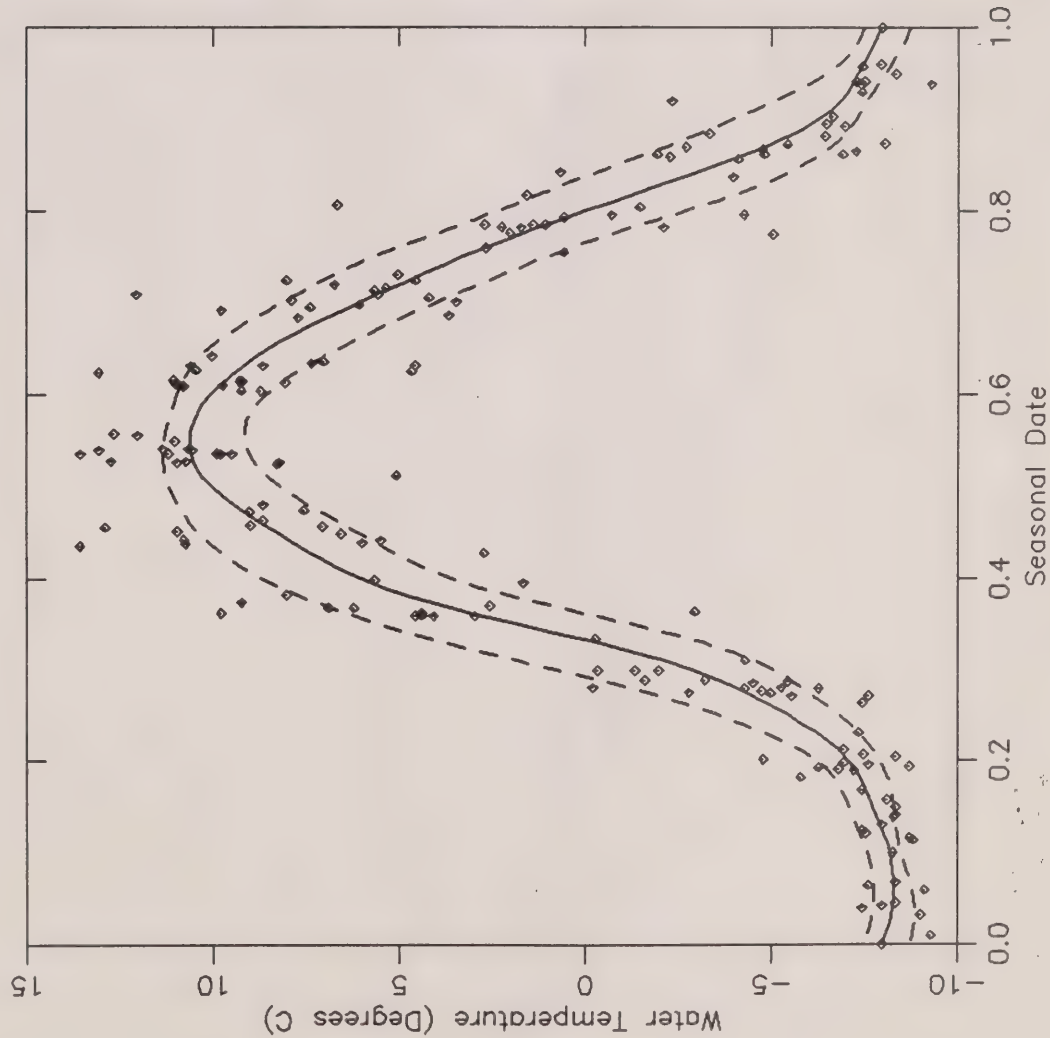
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.382
 $p(RHO) = 0.106$ dof = 17
% Variation due to trend = 11.1

Data file: TEMP018.FTM
Parameter: FWTEMP
Site: 06007601802

RELATIVE SEASONALITY IN DE-TRENDED SERIES

Water Temperature (Degrees C)

Credit R. at 20th Side Rd., Caledon Twp.



Run #2: 1 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Seasonal median
-- 1st & 3rd quartiles

Seasonal Max @ JUL 20
Seasonal Min @ JAN 22
Seasonal Amplitude = 18.9
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

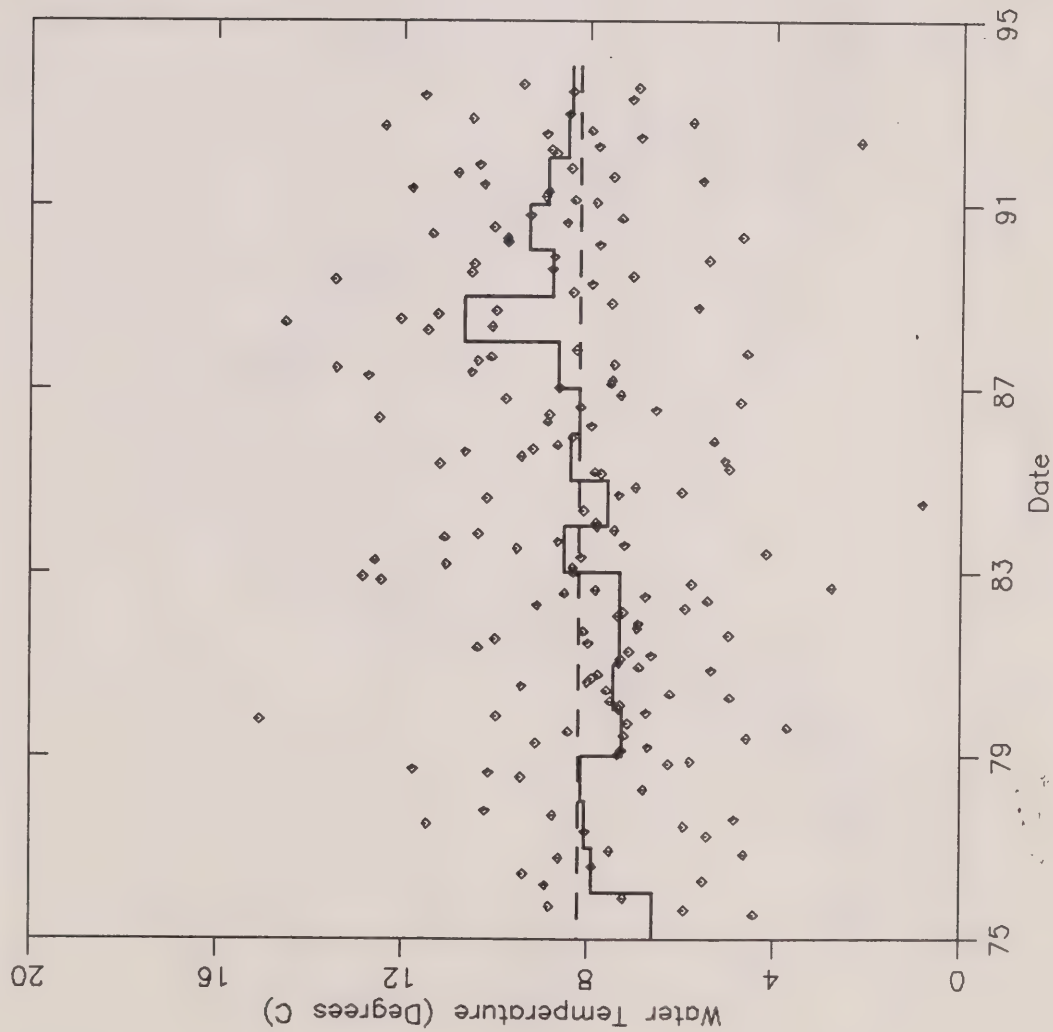
Observations = 174
Series begins @ JUL 17 1975
Series ends @ AUG 12 1993
% Variation due to seasonal = 91.3

Data file: TEMP018.FTM
Parameter: FWTEMP
Site: 06007601802

TRENDS IN DE-SEASONALIZED DATA SERIES

Water Temperature (Degrees C)

Credit R. Erin Br. at Wellington/Peel Cty. Boundary



Run #2: 1 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Annual median
-- Mean annual median
= 8.193

Maximum trend @ 1988 = 10.670
Minimum trend @ 1975 = 6.579
Trend range = 4.092

Observations = 175
Series begins @ JUL 17 1975
Series ends @ AUG 12 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

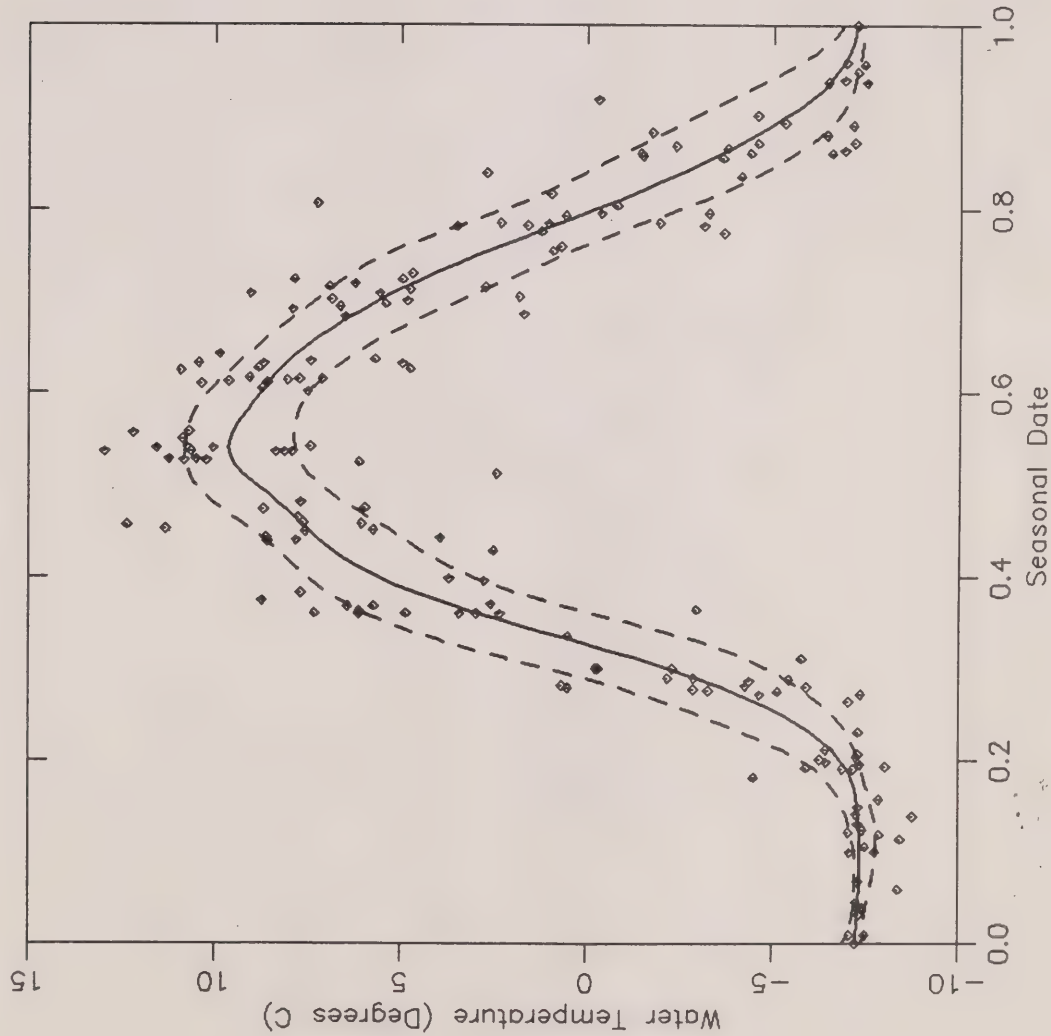
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.763
 $p(RHO) = 0.000$ dof = 17
% Variation due to trend = 10.1

Data file: TEMP015.FTM
Parameter: FWTEMP
Site: 06007601502

RELATIVE SEASONALITY IN DE-TRENDED SERIES

Water Temperature (Degrees C)

Credit R. Erin Br. at Wellington/Peel Cty. Boundary



Run #2: 1 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JUL 17
Seasonal Min @ FEB 2
Seasonal Amplitude = 17.0

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 175

Series begins @ JUL 17 1975

Series ends @ AUG 12 1993

% Variation due to seasonal = 89.5

Data file: TEMP015.FTM

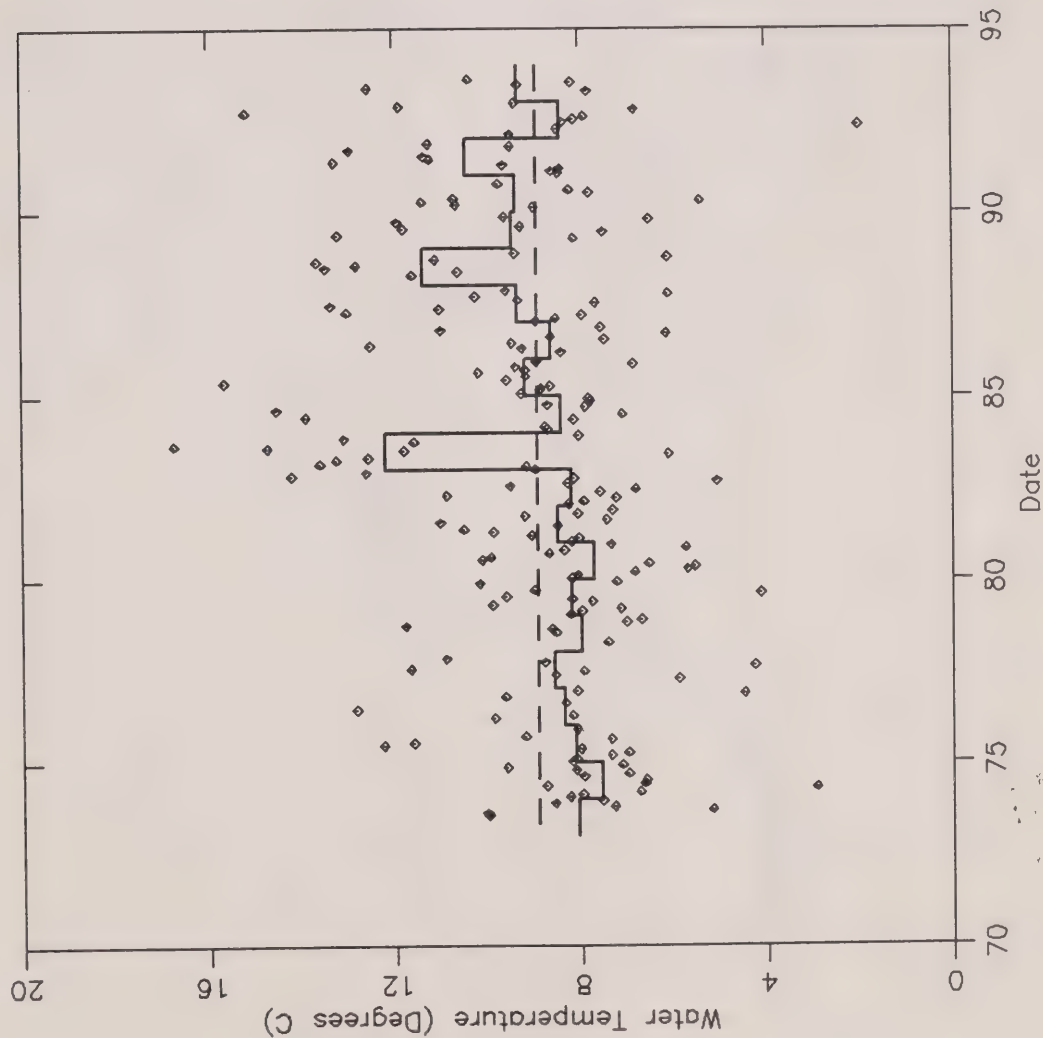
Parameter: FWTEMP

Site: 06007601502

TRENDS IN DE-SEASONALIZED DATA SERIES

Water Temperature (Degrees C)

Credit R. at Cty. Rd. 9, Terra Cotta



Run #2: 2 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Annual median
-- Mean annual median
= 8.910

Maximum trend @ 1983 = 12.176
Minimum trend @ 1974 = 7.535
Trend range = 4.641

Observations = 197
Series begins @ JUL 25 1973
Series ends @ AUG 12 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:

Spearman RHO = 0.727

p(RHO) = 0.000 dof = 19

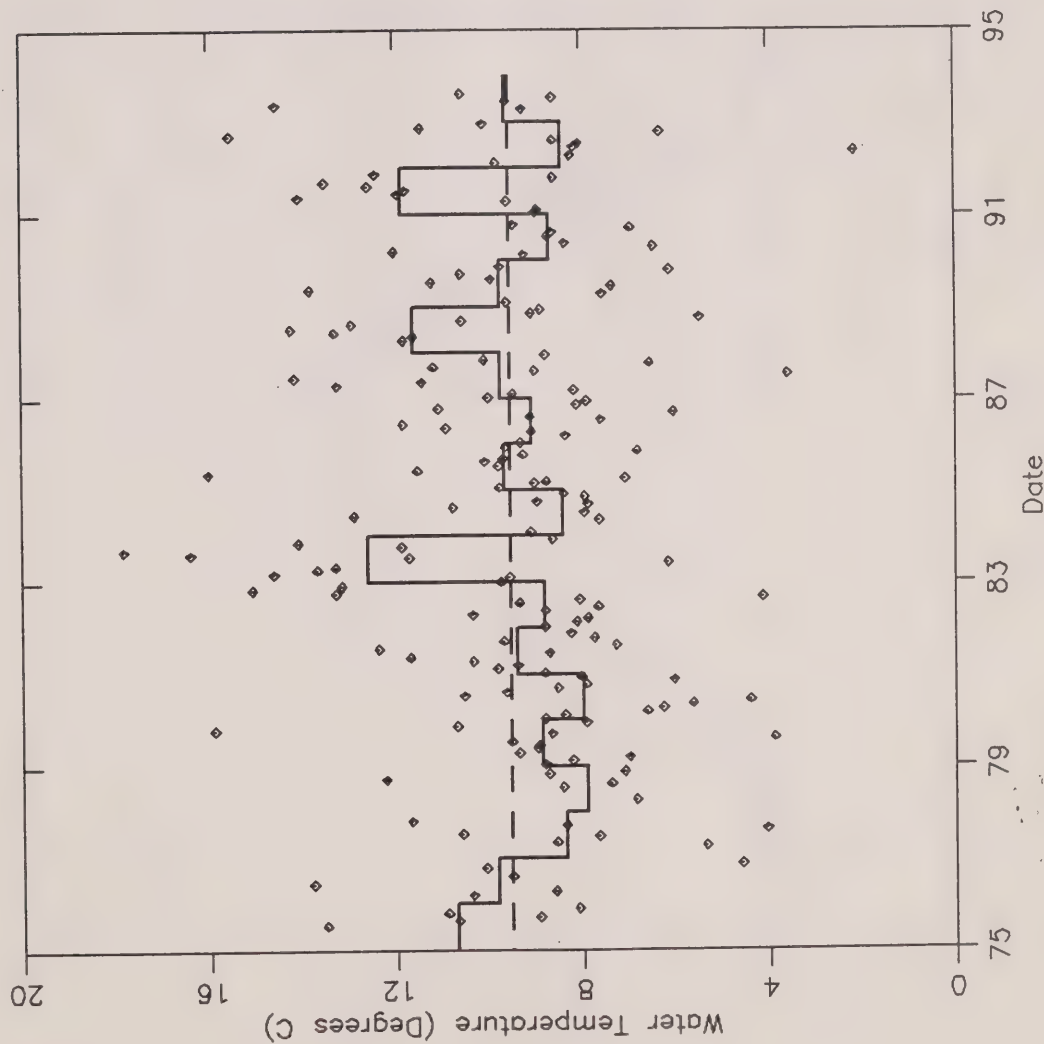
% Variation due to trend = 18.8

Data file: TEMPO10.FTM
Parameter: FWTEMP
Site: 06007601002

TRENDS IN DE-SEASONALIZED DATA SERIES

Water Temperature (Degrees C)

Credit R. at 22nd Side Rd., Glen Williams



Run #1:

Run date: December 10, 1993

pgm = TRX

— Annual median

-- Mean annual median
= 9.527

Maximum trend @ 1983 = 12.578

Minimum trend @ 1978 = 7.900

Trend range = 4.677

Observations = 178

Series begins @ JUL 17 1975

Series ends @ AUG 12 1993

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:

Spearman RHO = 0.182

p(RHO) = 0.455 dof = 17

% Variation due to trend = 16.5

Data file: TEMPO13.FTM

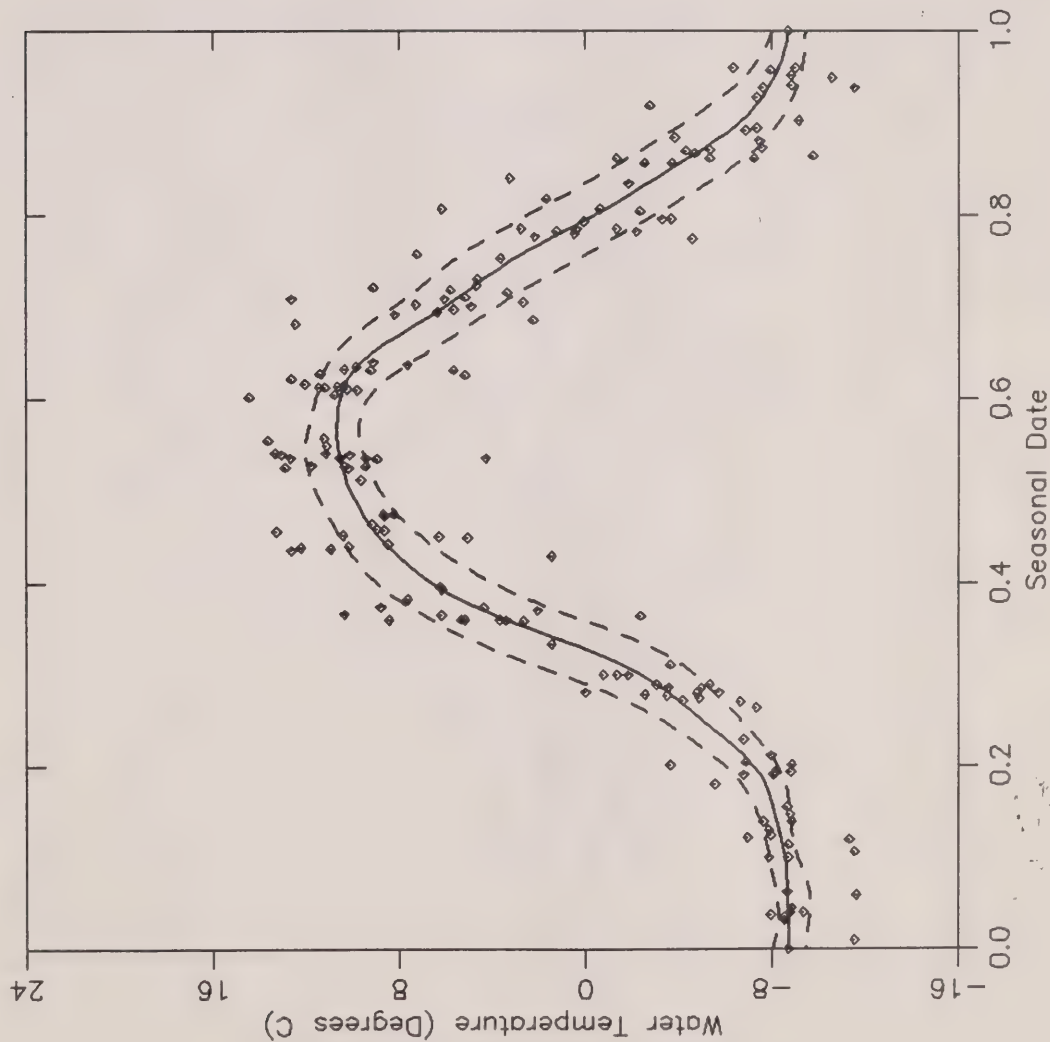
Parameter: FWTEMP

Site: 06007601302

RELATIVE SEASONALITY IN DE-TRENDED SERIES

Water Temperature (Degrees C)

Credit R. at 22nd Side Rd., Glen Williams



Run #1:

Run date: December 10, 1993

pgm = TRX

— Seasonal median

- - - 1st & 3rd quartiles

Seasonal Max @ JUL 28

Seasonal Min @ JAN 8

Seasonal Amplitude = 19.4

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

Observations = 178

Series begins @ JUL 17 1975

Series ends @ AUG 12 1993

% Variation due to seasonal = 90.8

Data file: TEMPO13.FTM

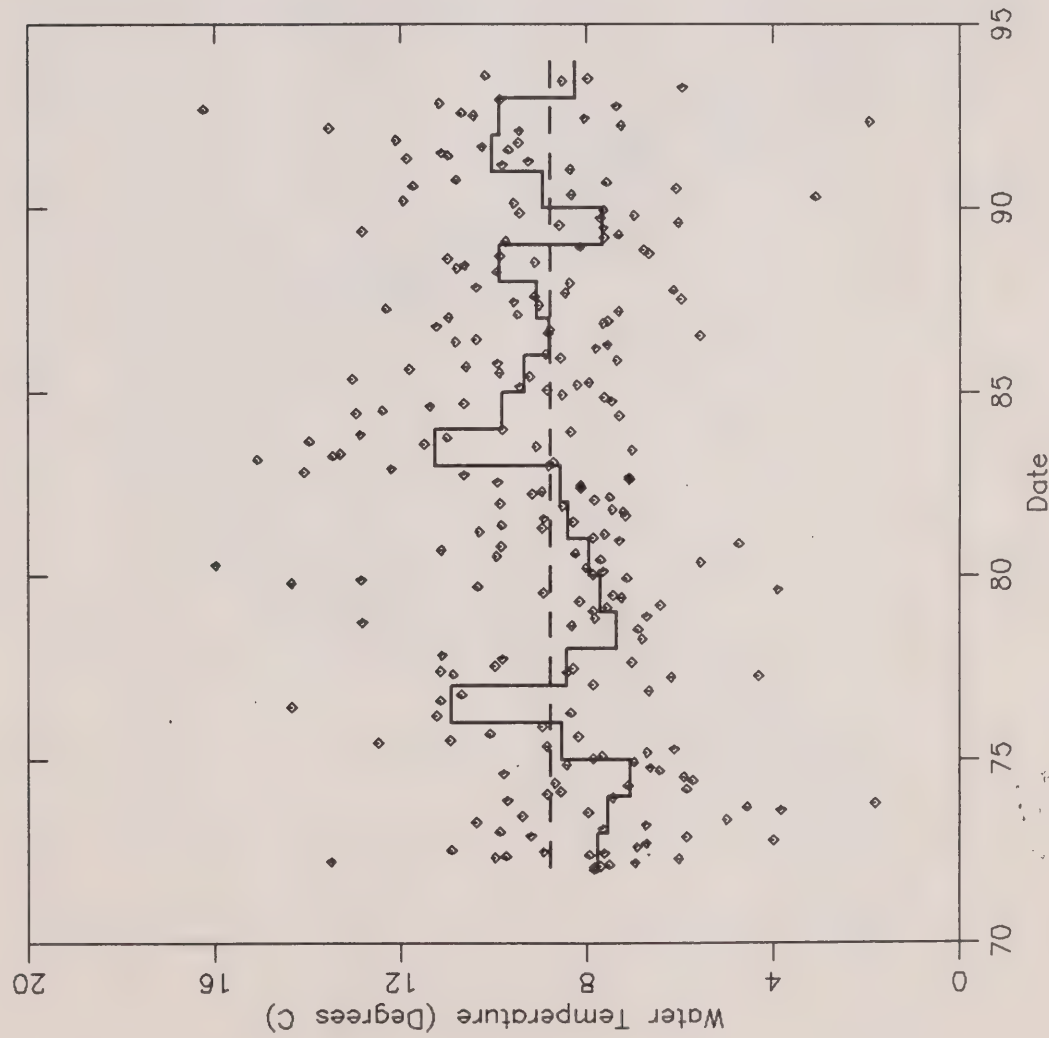
Parameter: FWTEMP

Site: 06007601302

TRENDS IN DE-SEASONALIZED DATA SERIES

Water Temperature (Degrees C)

Black Ck. at 1st Conc. u/s from Limehouse



Run #2: 2 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Annual median
-- Mean annual median
= 8.777

Maximum trend @ 1983 = 11.246
Minimum trend @ 1974 = 7.056
Trend range = 4.190

Observations = 232
Series begins @ JAN 5 1972
Series ends @ AUG 12 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

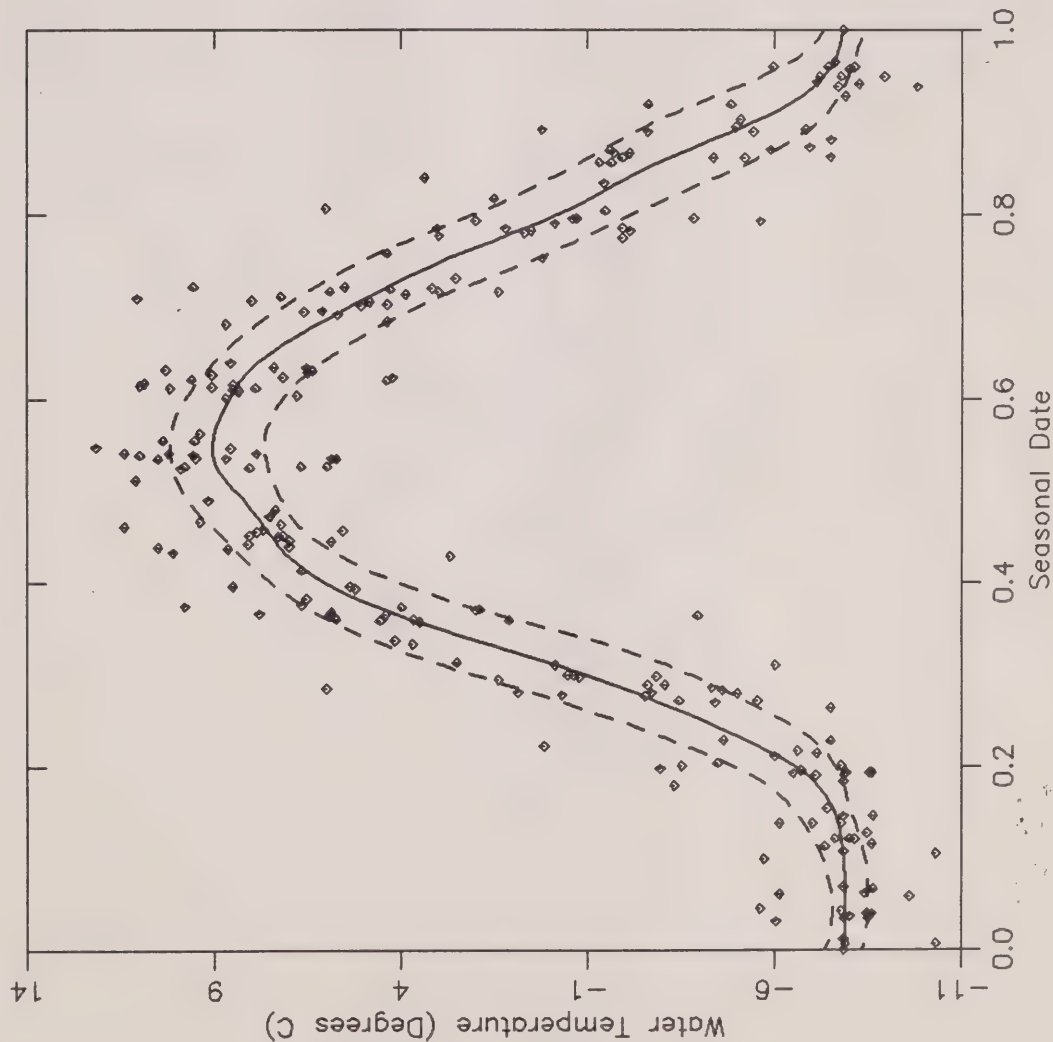
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.466
p(RHO) = 0.029 dof = 20
% Variation due to trend = 12.9

Data file: TEMP008.FTM
Parameter: FWTEMP
Site: 06007600802

RELATIVE SEASONALITY IN DE-TRENDED SERIES

Water Temperature (Degrees C)

Black Ck. at 1st Conc. u/s from Limehouse



Run #2: 2 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JUL 20
Seasonal Min @ JAN 19
Seasonal Amplitude = 16.9

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 232
Series begins @ JAN 5 1972
Series ends @ AUG 12 1993

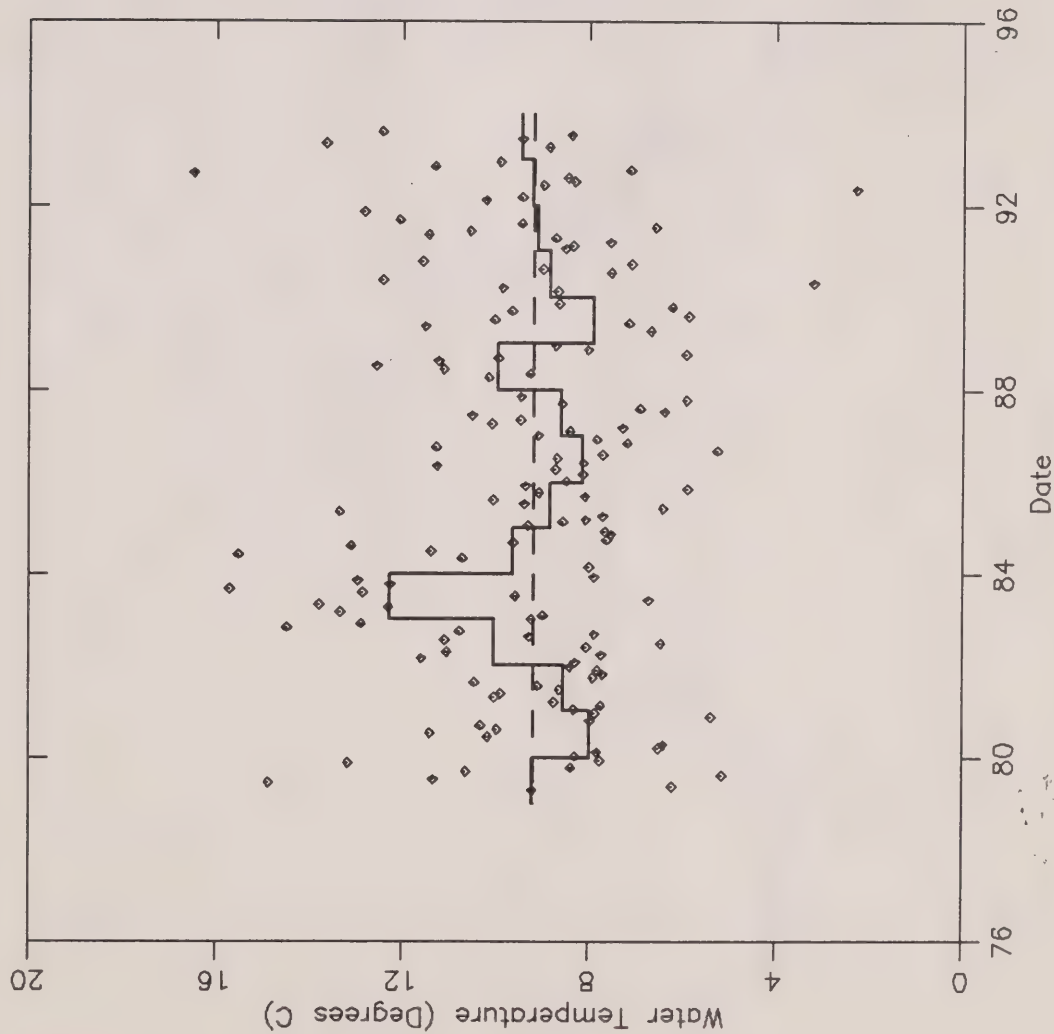
% Variation due to seasonal = 89.6

Data file: TEMP008.FTM
Parameter: FWTEMP
Site: 06007600802

TRENDS IN DE-SEASONALIZED DATA SERIES

Water Temperature (Degrees C)

Credit R. West Br. at Cty Rd. 13, Georgetown



Run #1:

Run date: December 10, 1993

pgm = TRX

— Annual median

-- Mean annual median
= 9.170

Maximum trend @ 1983 = 12.264

Minimum trend @ 1989 = 7.891

Trend range = 4.373

Observations = 150

Series begins @ APR 19 1979

Series ends @ AUG 12 1993

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:

Spearman RHO = 0.000

p(RHO) = 1.000 dof = 13

% Variation due to trend = 9.5

Data file: TEMPO22.FTM

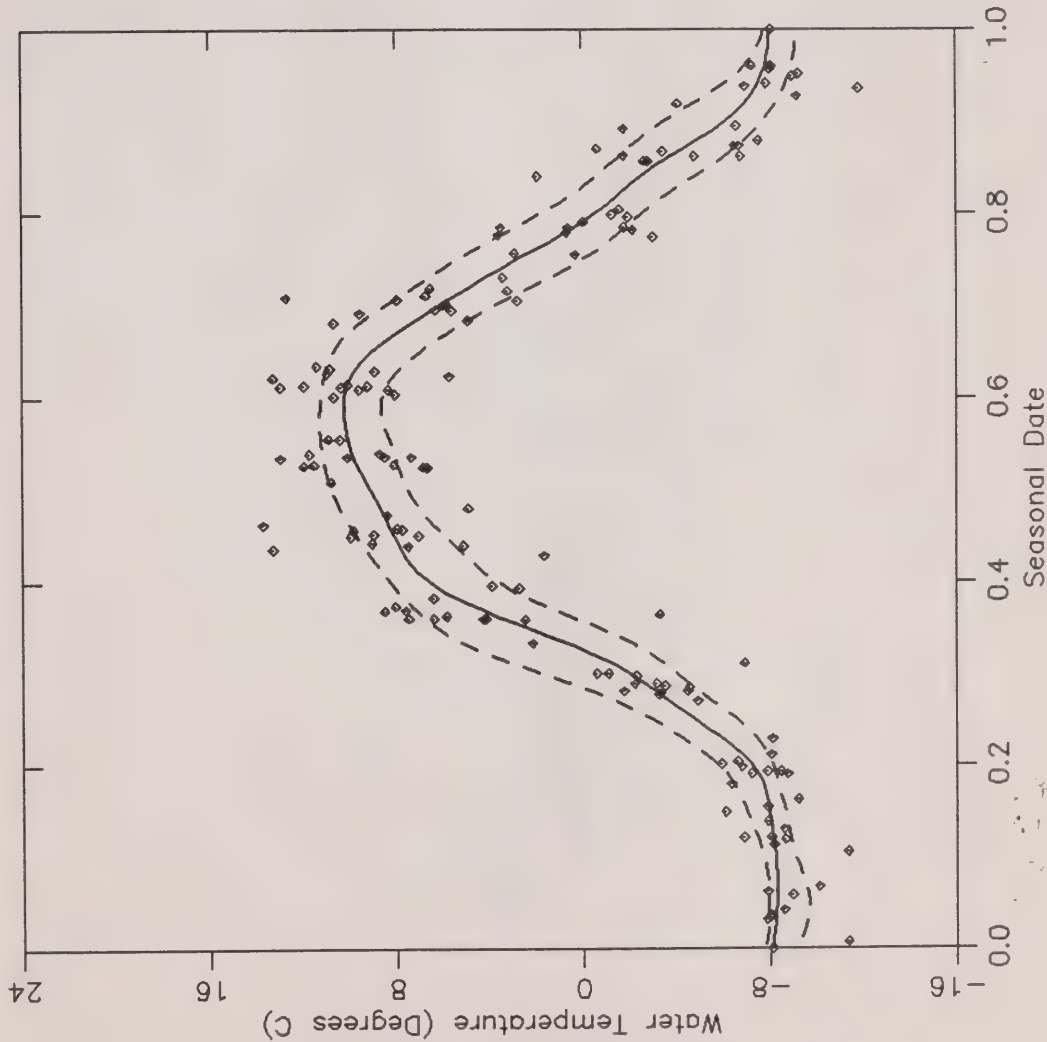
Parameter: FWTEMP

Site: 06007602202

RELATIVE SEASONALITY IN DE-TRENDED SERIES

Water Temperature (Degrees C)

Credit R. West Br. at Cty Rd. 13, Georgetown



Run #1:

Run date: December 10, 1993

pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ AUG 4
Seasonal Min @ JAN 22
Seasonal Amplitude = 18.5

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

Observations = 150

Series begins @ APR 19 1979

Series ends @ AUG 12 1993

% Variation due to seasonal = 91.3

Data file: TEMP022.FTM

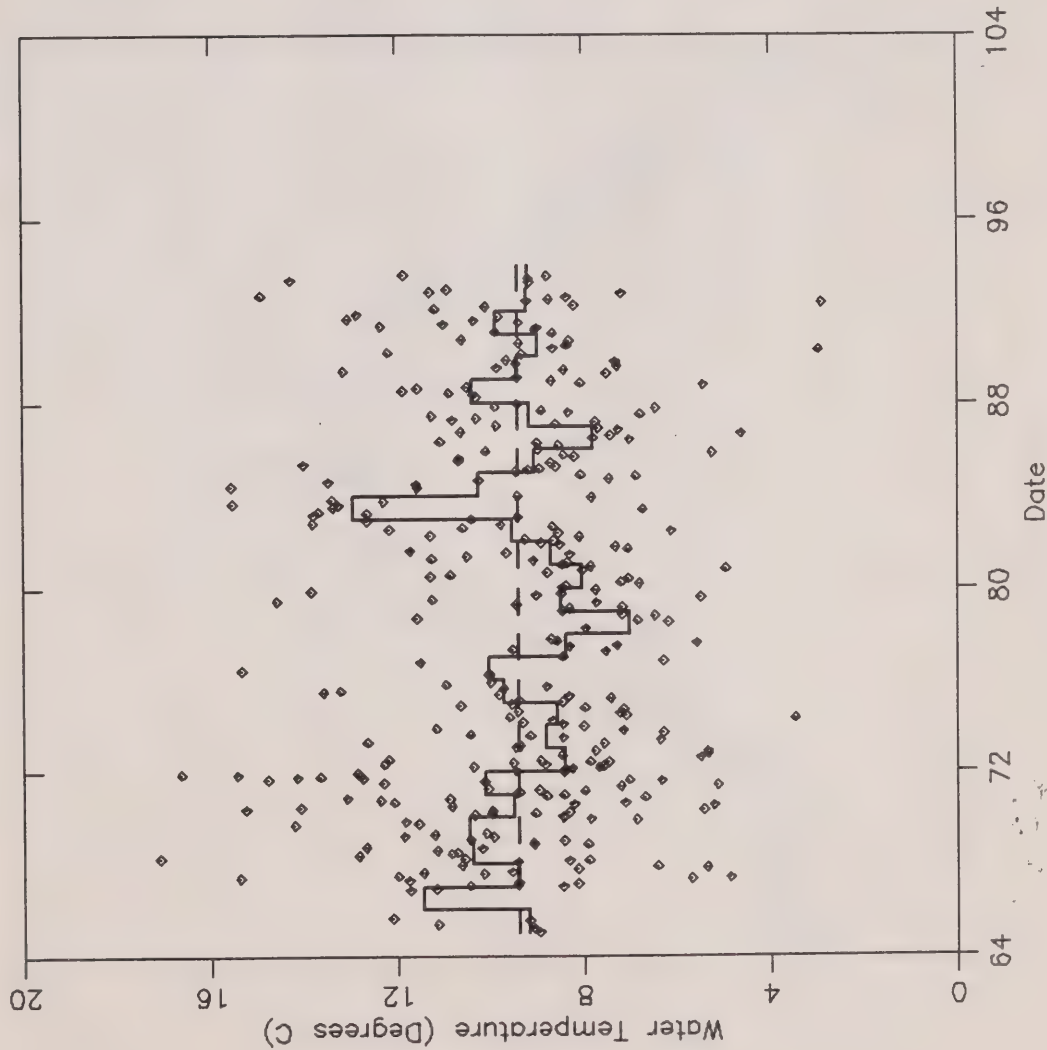
Parameter: FWTEMP

Site: 06007602202

TRENDS IN DE-SEASONALIZED DATA SERIES

Water Temperature (Degrees C)

Credit R. West Br. at Hwy. 7, Norval



Run #2: 3 FAR OUTLIERS DELETED
Run date: December 8, 1993
pgm = TRX

— Annual median
- - - Mean annual median
= 9.387

Maximum trend @ 1983 = 12.940
Minimum trend @ 1978 = 7.008
Trend range = 5.932

Observations = 319
Series begins @ JAN 19 1965
Series ends @ AUG 12 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

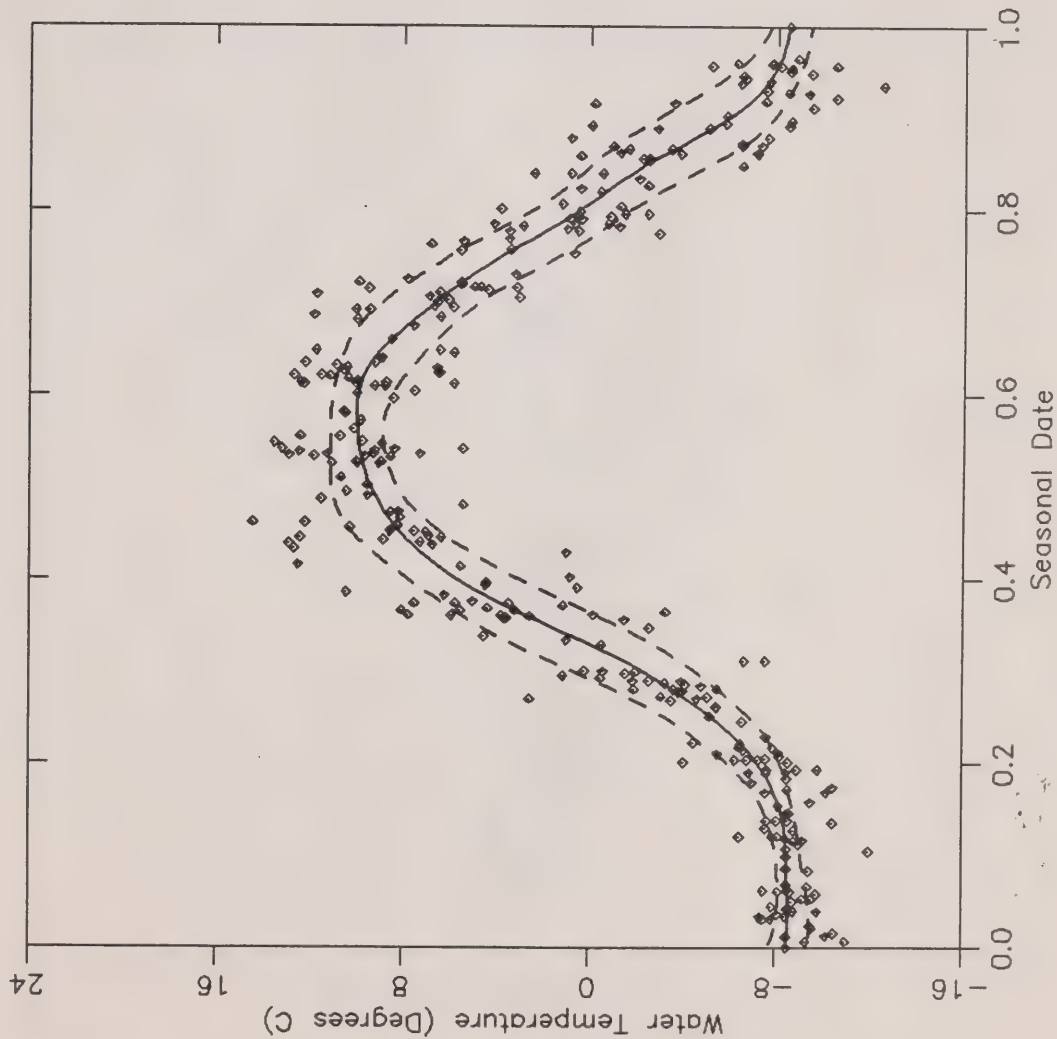
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = -0.164
 $p(RHO) = 0.395$ dof = 27
% Variation due to trend = 13.1

Data file: TEMP004.FTM
Parameter: FWTEMP
Site: 06007600402

RELATIVE SEASONALITY IN DE-TRENDED SERIES

Water Temperature (Degrees C)

Credit R. West Br. at Hwy. 7, Norval



Run #2: 3 FAR OUTLIERS DELETED
Run date: December 8, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JUL 31
Seasonal Min @ JAN 15
Seasonal Amplitude = 18.6
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 319
Series begins @ JAN 19 1965
Series ends @ AUG 12 1993

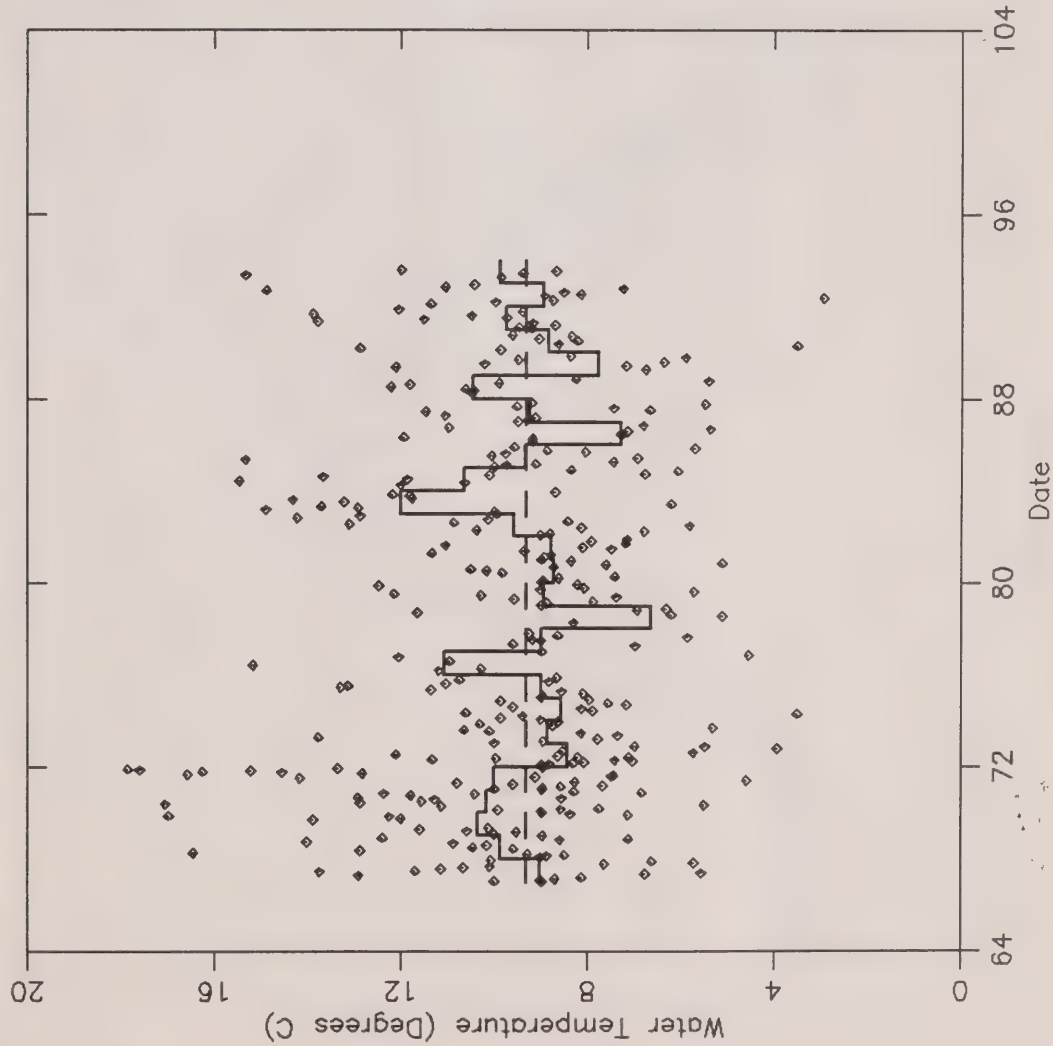
% Variation due to seasonal = 91.2

Data file: TEMP004.FTM
Parameter: FWTEMP
Site: 06007600402

TRENDS IN DE-SEASONALIZED DATA SERIES

Water Temperature (Degrees C)

Credit R. at Hwy. 7, Norval



Run #2: 3 FAR OUTLIERS DELETED
Run date: December 8, 1993
pgm = TRX

— Annual median
- - - Mean annual median
= 9.298

Maximum trend @ 1983 = 11.999
Minimum trend @ 1978 = 6.631
Trend range = 5.368

Observations = 306
Series begins @ JAN 9 1967
Series ends @ AUG 12 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

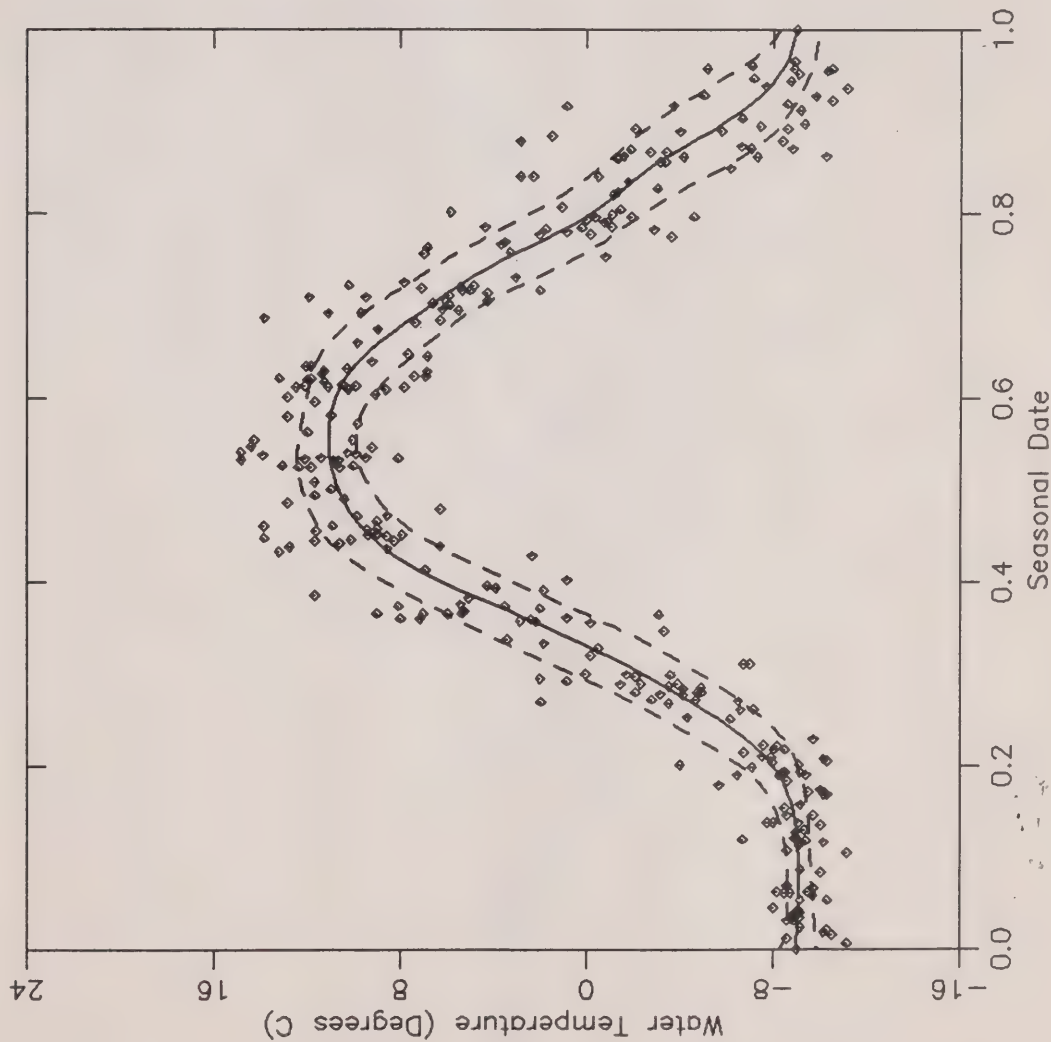
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = -0.087
 $p(RHO) = 0.665$ dof = 25
% Variation due to trend = 13.8

Data file: TEMPO03.FTM
Parameter: FWTEMP
Site: 06007600302

RELATIVE SEASONALITY IN DE-TRENDED SERIES

Water Temperature (Degrees C)

Credit R. at Hwy. 7, Norval



Run #2: 3 FAR OUTLIERS DELETED
Run date: December 8, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JUL 24
Seasonal Min @ JAN 22
Seasonal Amplitude = 20.2

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 306
Series begins @ JAN 9 1967
Series ends @ AUG 12 1993

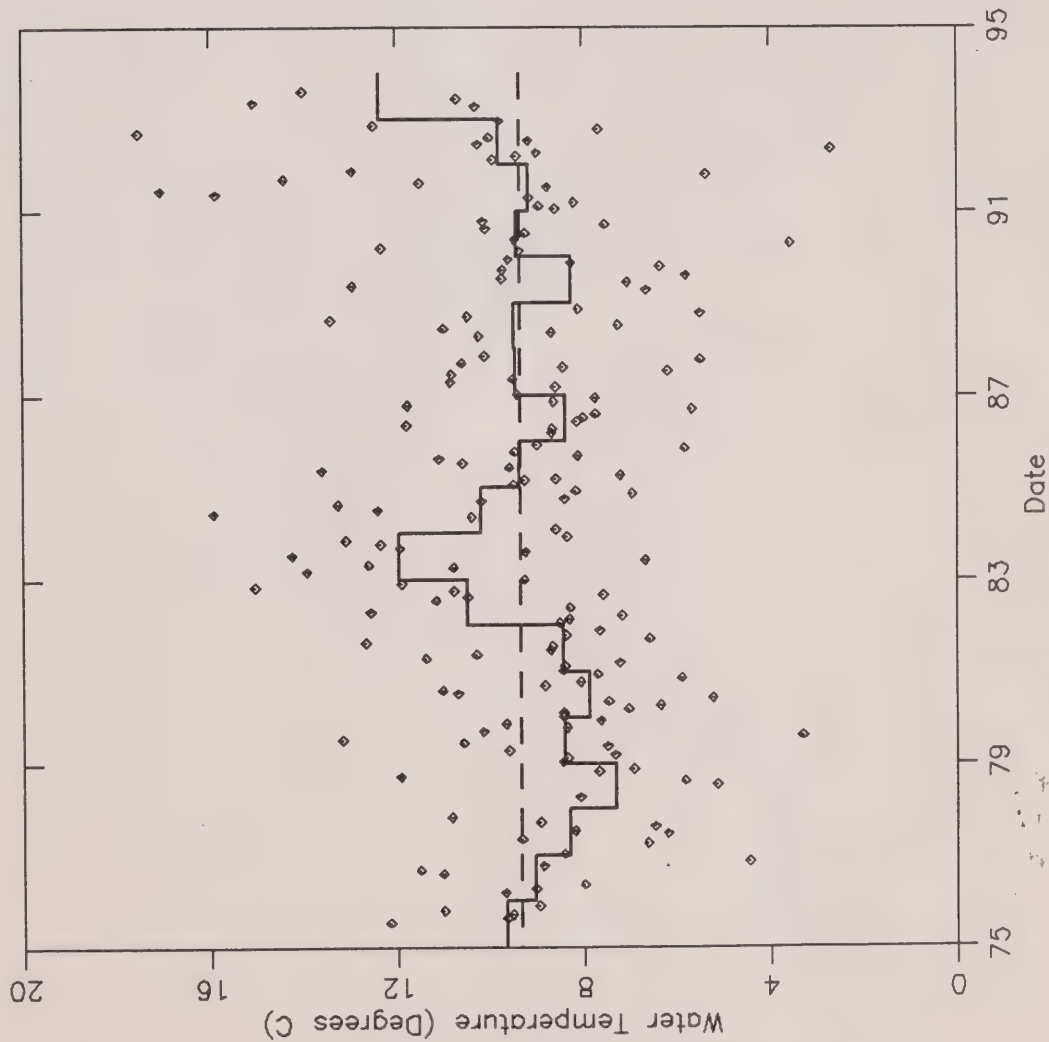
% Variation due to seasonal = 91.2

Data file: TEMP003.FTM
Parameter: FWTEMP
Site: 06007600302

TRENDS IN DE-SEASONALIZED DATA SERIES

Water Temperature (Degrees C)

Credit R. at Derry Rd., West of Hwy. 10



Run #1:

Run date: December 10, 1993

pgm = TRX

— Annual median
 - - Mean annual median
 = 9.326

Maximum trend @ 1993 = 12.345
 Minimum trend @ 1978 = 7.304
 Trend range = 5.042

Observations = 175
 Series begins @ JUL 17 1975
 Series ends @ AUG 12 1993

Iterations = 3
 Minimum Window = 1/8 YEAR
 Minimum N Per Window = 11

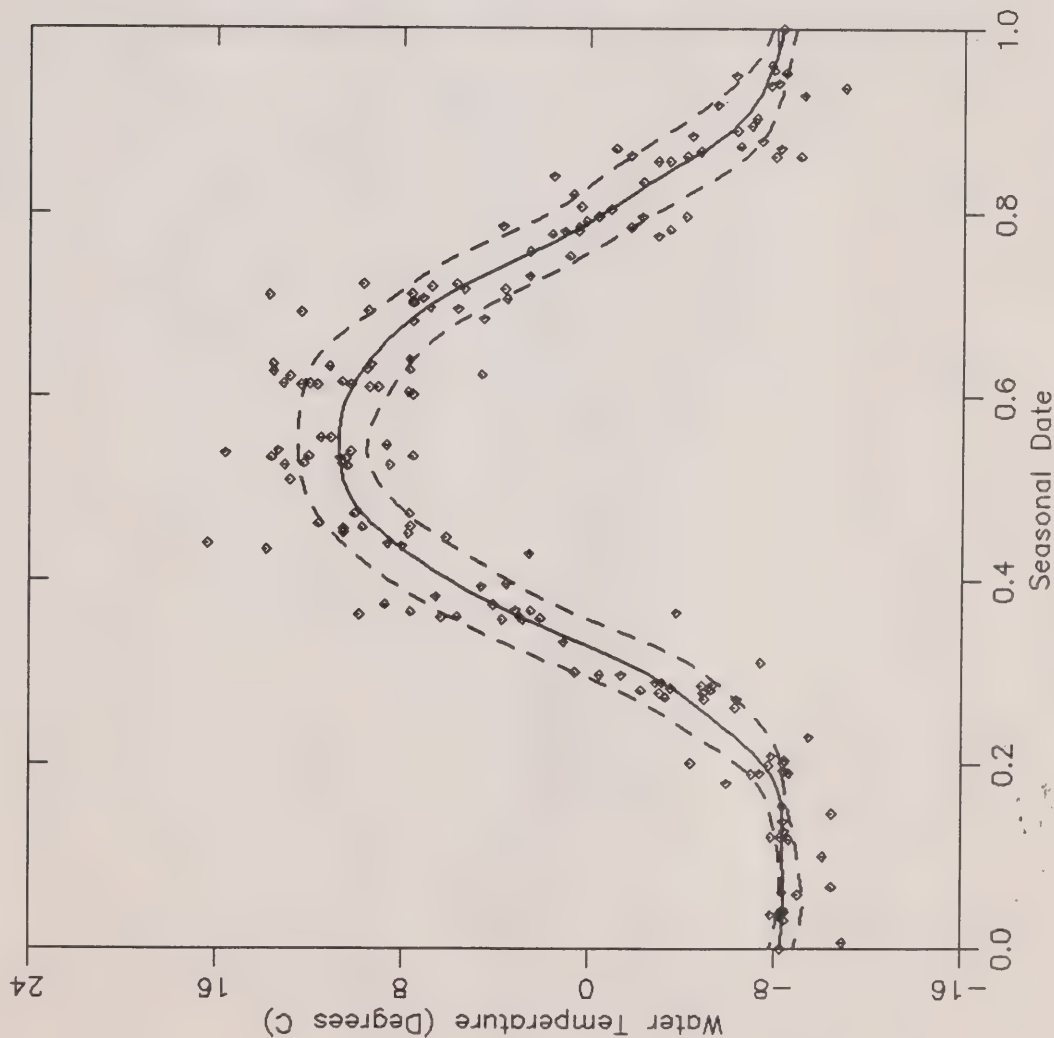
TREND TEST ON ANNUAL MEDIANS:
 Spearman RHO = 0.365
 $p(RHO) = 0.124$ dof = 17
 % Variation due to trend = 13.4

Data file: TEMPO17.FTM
 Parameter: FWTEMP
 Site: 06007601702

RELATIVE SEASONALITY IN DE-TRENDED SERIES

Water Temperature (Degrees C)

Credit R. at Derry Rd., West of Hwy. 10



Run #1:

Run date: December 10, 1993

pgm = TRX

— Seasonal median

- - - 1st & 3rd quartiles

Seasonal Max @ JUL 20

Seasonal Min @ JAN 22

Seasonal Amplitude = 19.1

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

Observations = 175

Series begins @ JUL 17 1975

Series ends @ AUG 12 1993

% Variation due to seasonal = 91.2

Data file: TEMP017.FTM

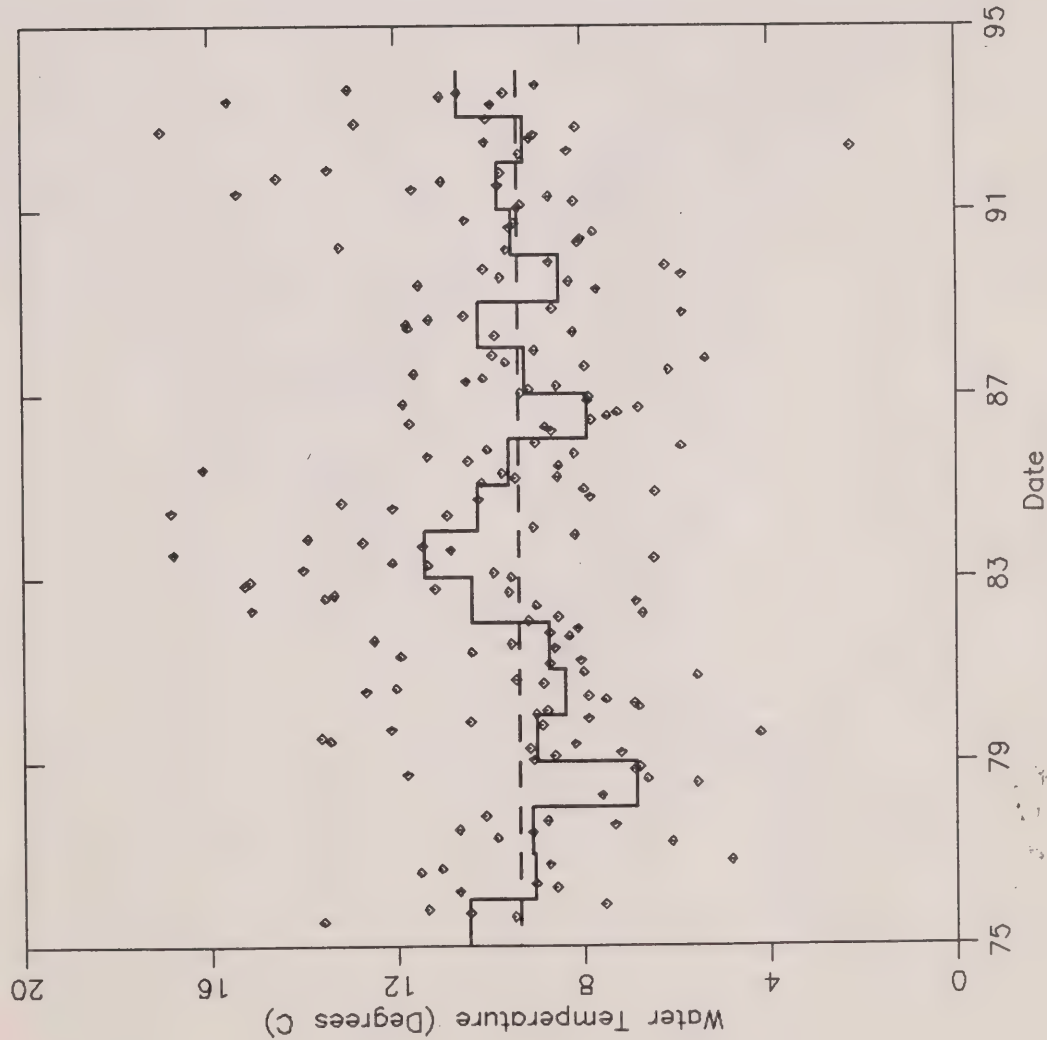
Parameter: FWTEMP

Site: 06007601702

TRENDS IN DE-SEASONALIZED DATA SERIES

Water Temperature (Degrees C)

Fletcher's Ck. at Steeles Ave., Brampton



Run #2: 1 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Annual median
-- Mean annual median
= 9.372

Maximum trend @ 1983 = 11.383
Minimum trend @ 1978 = 6.849
Trend range = 4.534

Observations = 178
Series begins @ JUL 17 1975
Series ends @ SEP 16 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

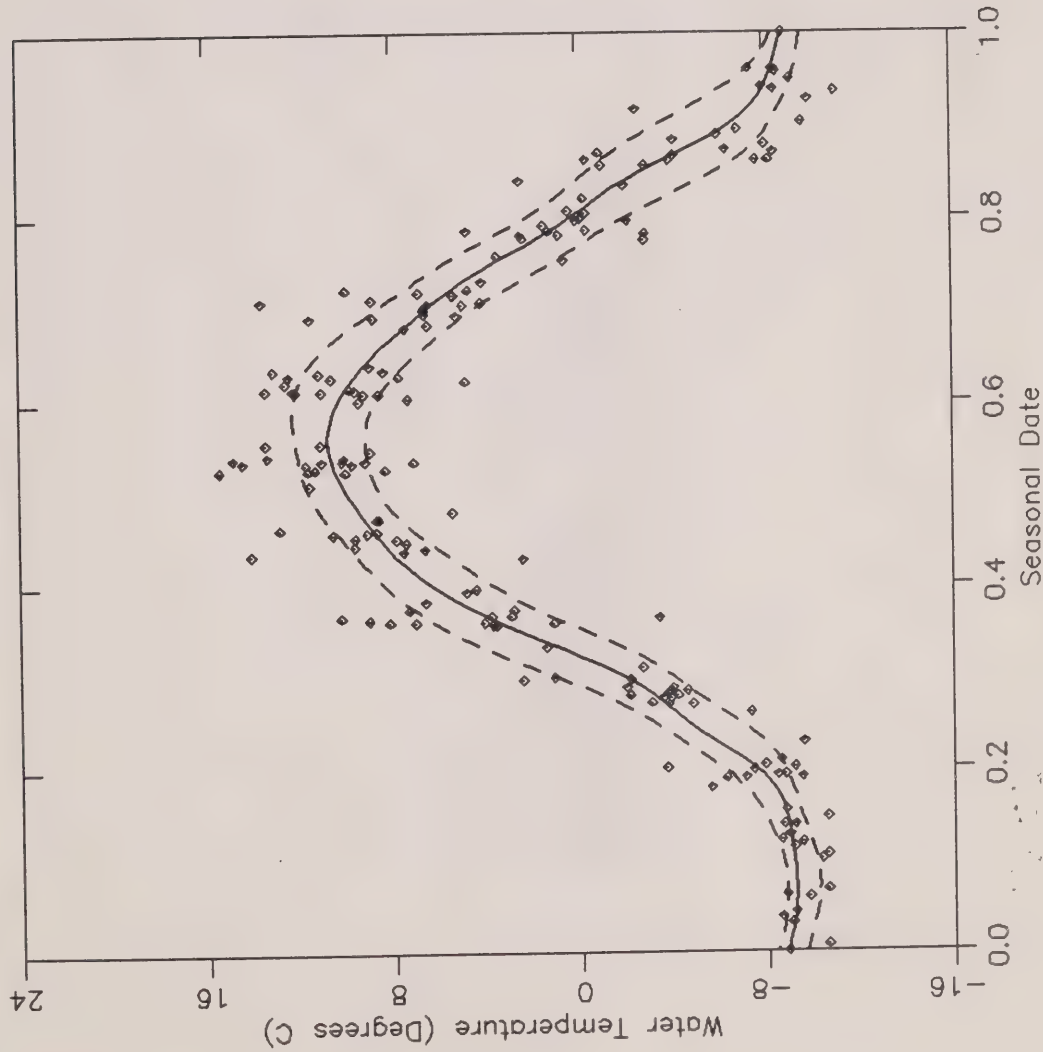
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.235
 $p(RHO) = 0.333$ dof = 17
% Variation due to trend = 13.7

Data file: TEMPO16.FTM
Parameter: FWTEMP
Site: 06007601602

RELATIVE SEASONALITY IN DE-TRENDED SERIES

Water Temperature (Degrees C)

Fletcher's Ck. at Steeles Ave., Brampton



Run #2: 1 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Seasonal median
-- 1st & 3rd quartiles

Seasonal Max @ JUL 24
Seasonal Min @ JAN 22
Seasonal Amplitude = 20.0

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 178
Series begins @ JUL 17 1975
Series ends @ SEP 16 1993

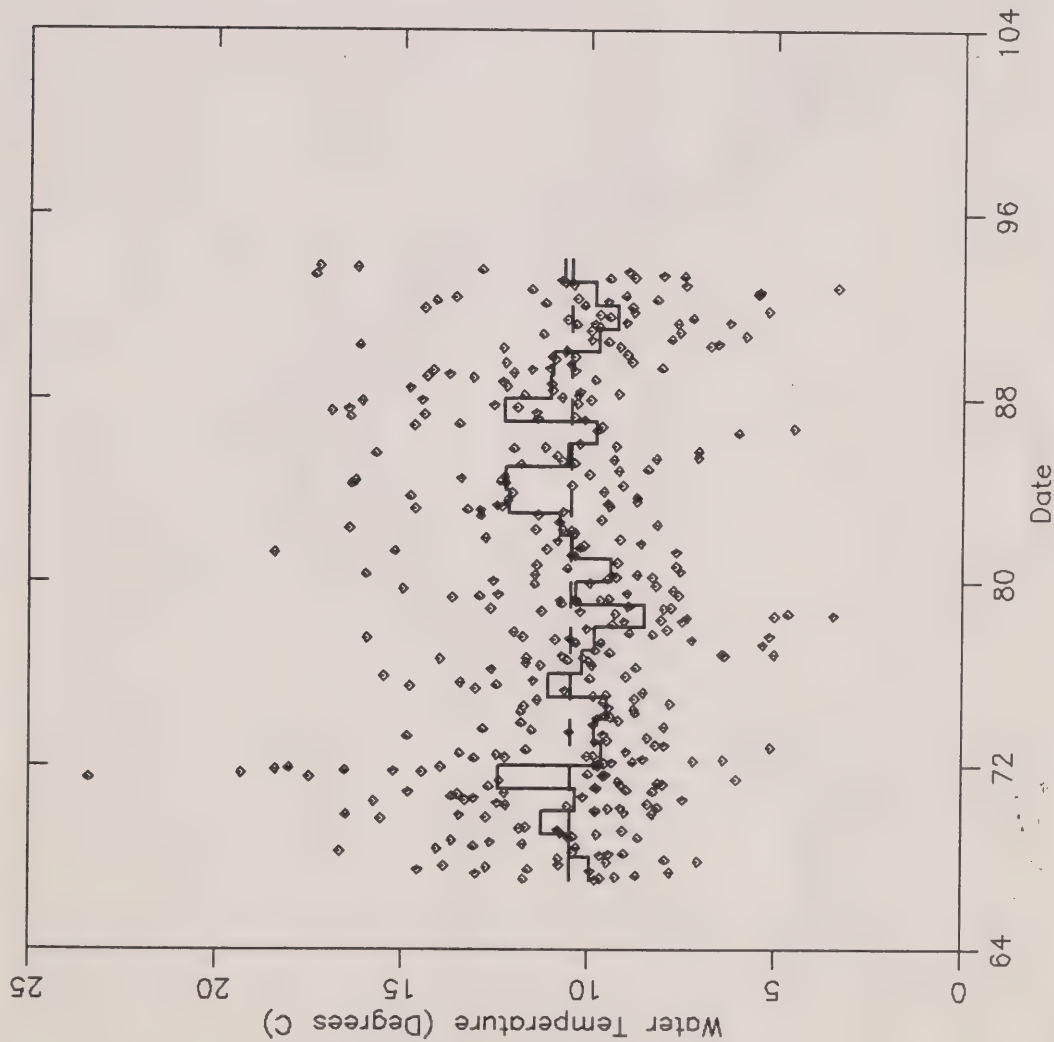
% Variation due to seasonal = 91.4

Data file: TEMPO16.FTM
Parameter: FWTEMP
Site: 06007601602

TRENDS IN DE-SEASONALIZED DATA SERIES

Water Temperature (Degrees C)

Credit R. at Hwy. 5, Erindale



Run #2: 1 FAR OUTLIERS DELETED
Run date: December 8, 1993
pgm = TRX

— Annual median
· - - Mean annual median
= 10.455

Maximum trend @ 1971 = 12.391
Minimum trend @ 1978 = 8.494
Trend range = 3.897

Observations = 375
Series begins @ JAN 9 1967
Series ends @ SEP 14 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

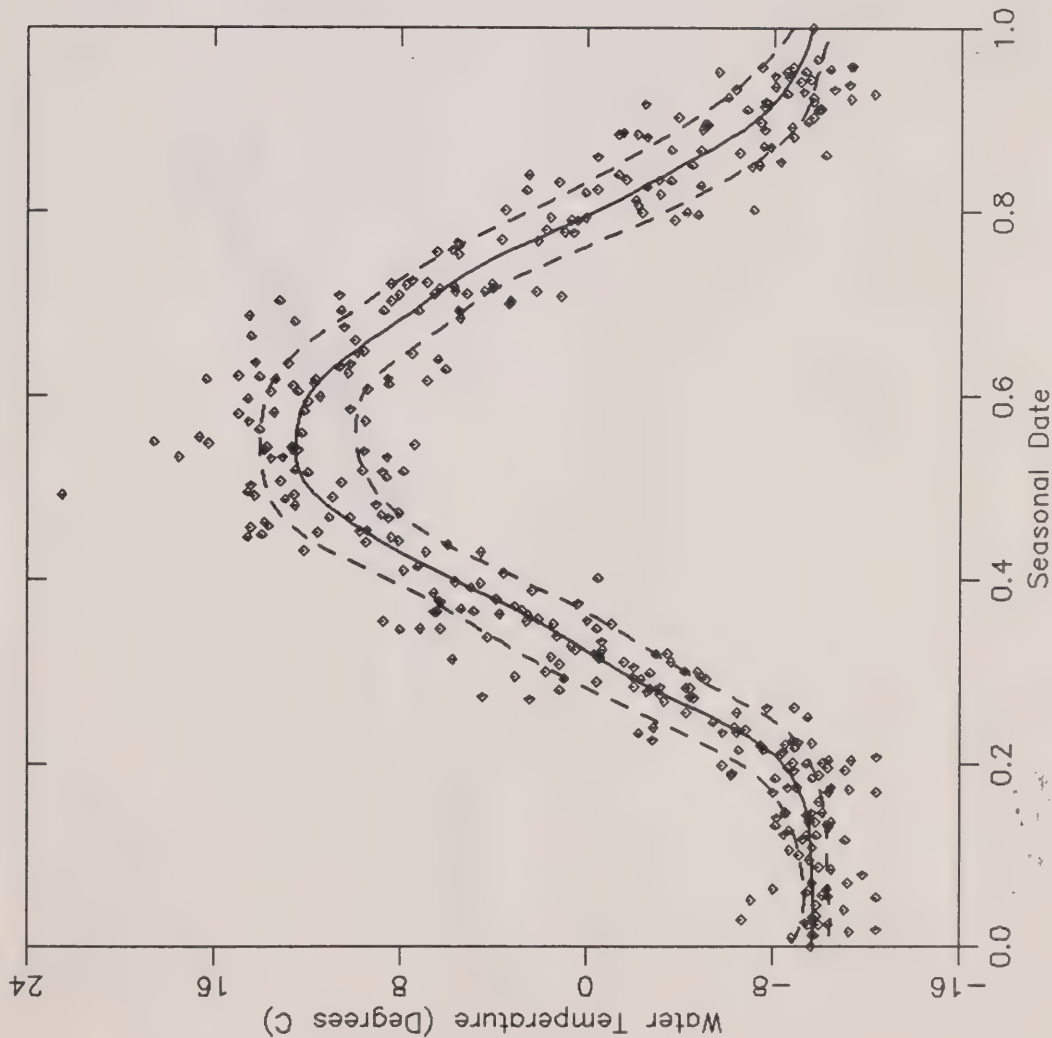
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.008
p(RHO) = 0.969 dof = 25
% Variation due to trend = 15.0

Data file: TEMP002.FTM
Parameter: FWTEMP
Site: 06007600202

RELATIVE SEASONALITY IN DE-TRENDED SERIES

Water Temperature (Degrees C)

Credit R. at Hwy. 5, Erindale



Run #2: 1 FAR OUTLIERS DELETED
Run date: December 8, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JUL 17
Seasonal Min @ JAN 15
Seasonal Amplitude = 22.3

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 375
Series begins @ JAN 9 1967
Series ends @ SEP 14 1993

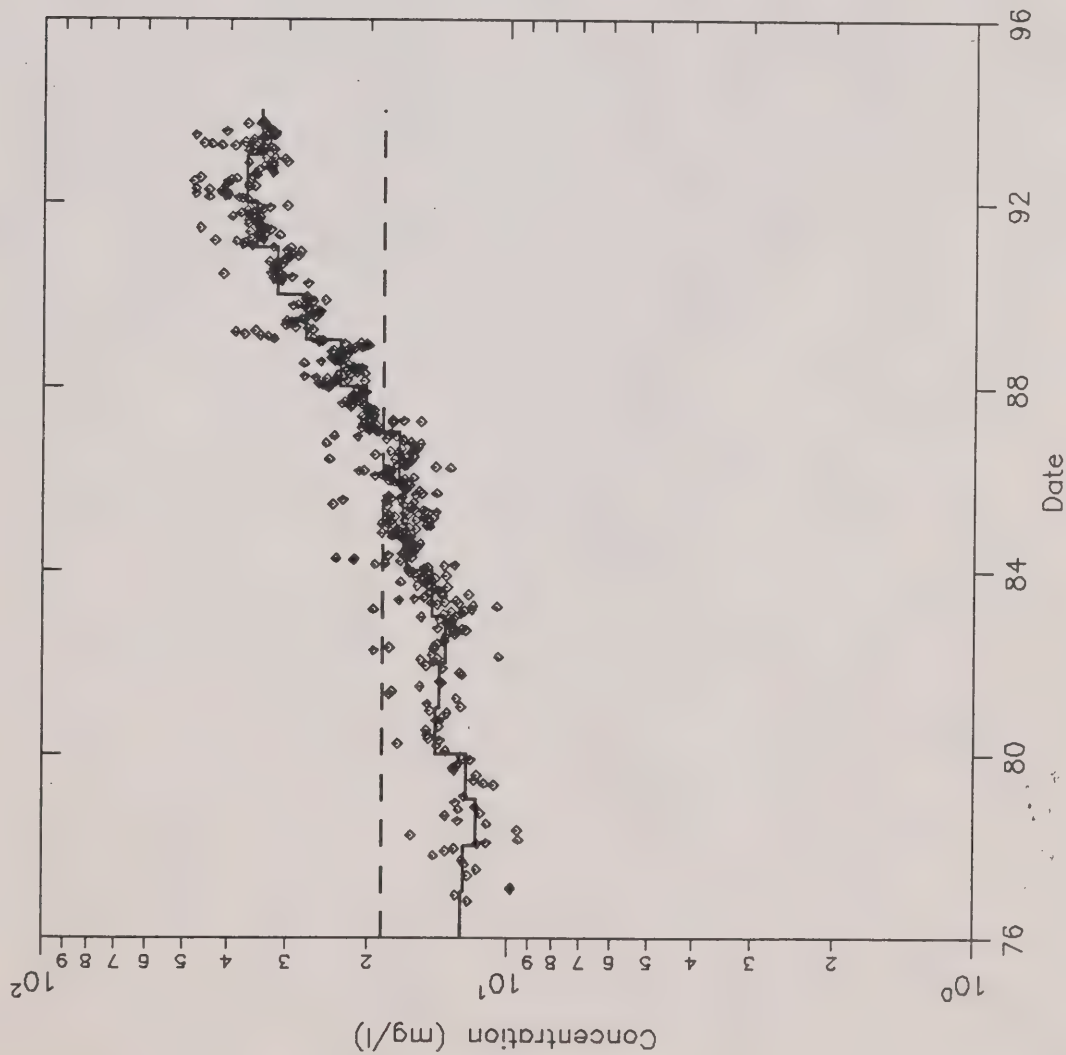
% Variation due to seasonal = 91.2

Data file: TEMP002.FTM
Parameter: FWTEMP
Site: 06007600202

TRENDS IN DE--SEASONALIZED LOG10 SERIES

Chlorides mg/l

Credit R. at Southern Dam of Orangeville Reservoir



Run #2: 28 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 18.646

Maximum trend @ 1992 = 36.664
Minimum trend @ 1978 = 11.687
Trend range = 24.977

Observations = 558
Series begins @ OCT 20 1976
Series ends @ OCT 4 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

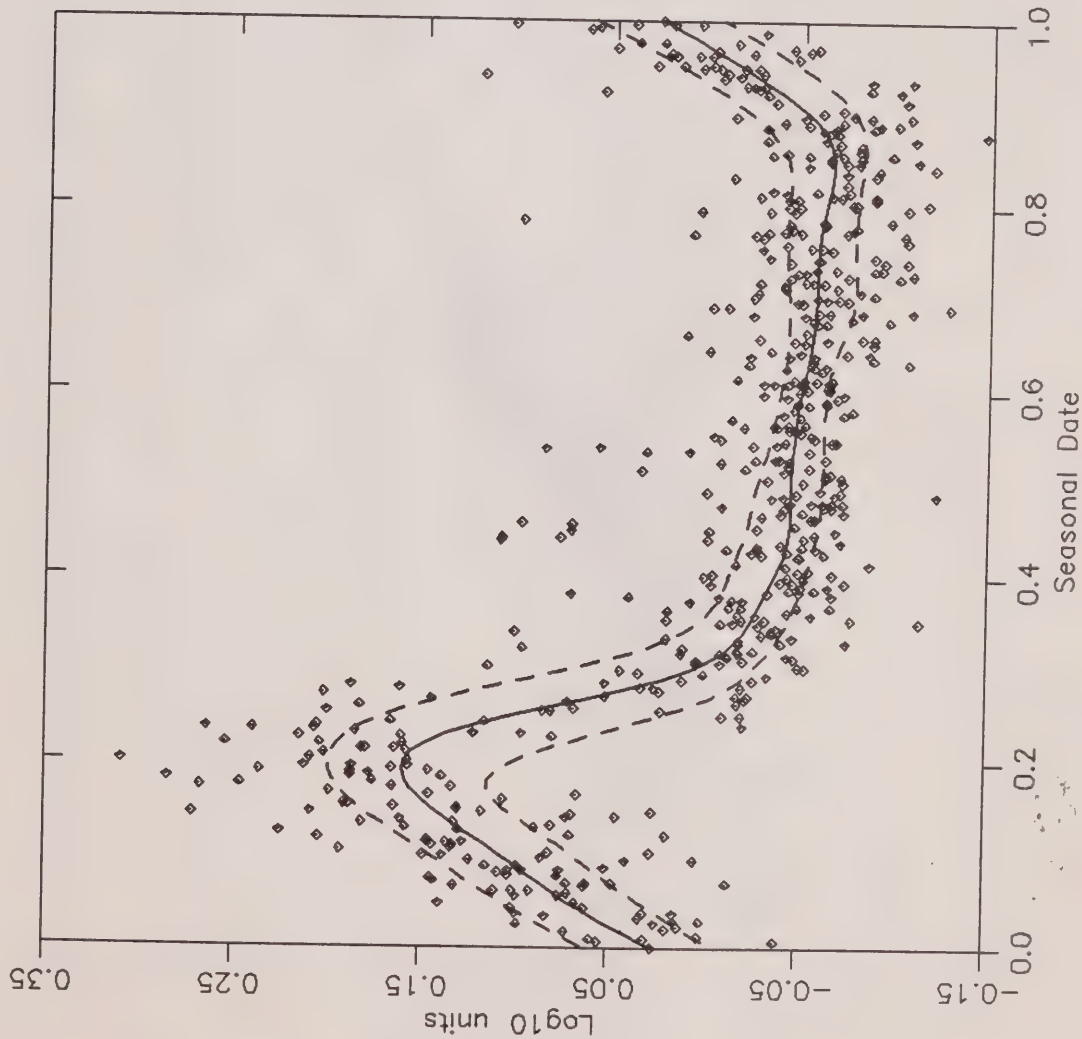
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.967
p(RHO) = 0.000 dof = 16
% Variation due to trend = 93.5

Data file: CLID019.FTM
Parameter: CLIDUR
Site: 06007601902

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Chlorides mg/l

Credit R. at Southern Dam of Orangeville Reservoir



Run #2: 28 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ MAR 11
Seasonal Min @ NOV 7
Seasonal Amplitude = 0.225

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 558

Series begins @ OCT 20 1976

Series ends @ OCT 4 1993

% Variation due to seasonal = 74.7

Data file: CLID019.FTM

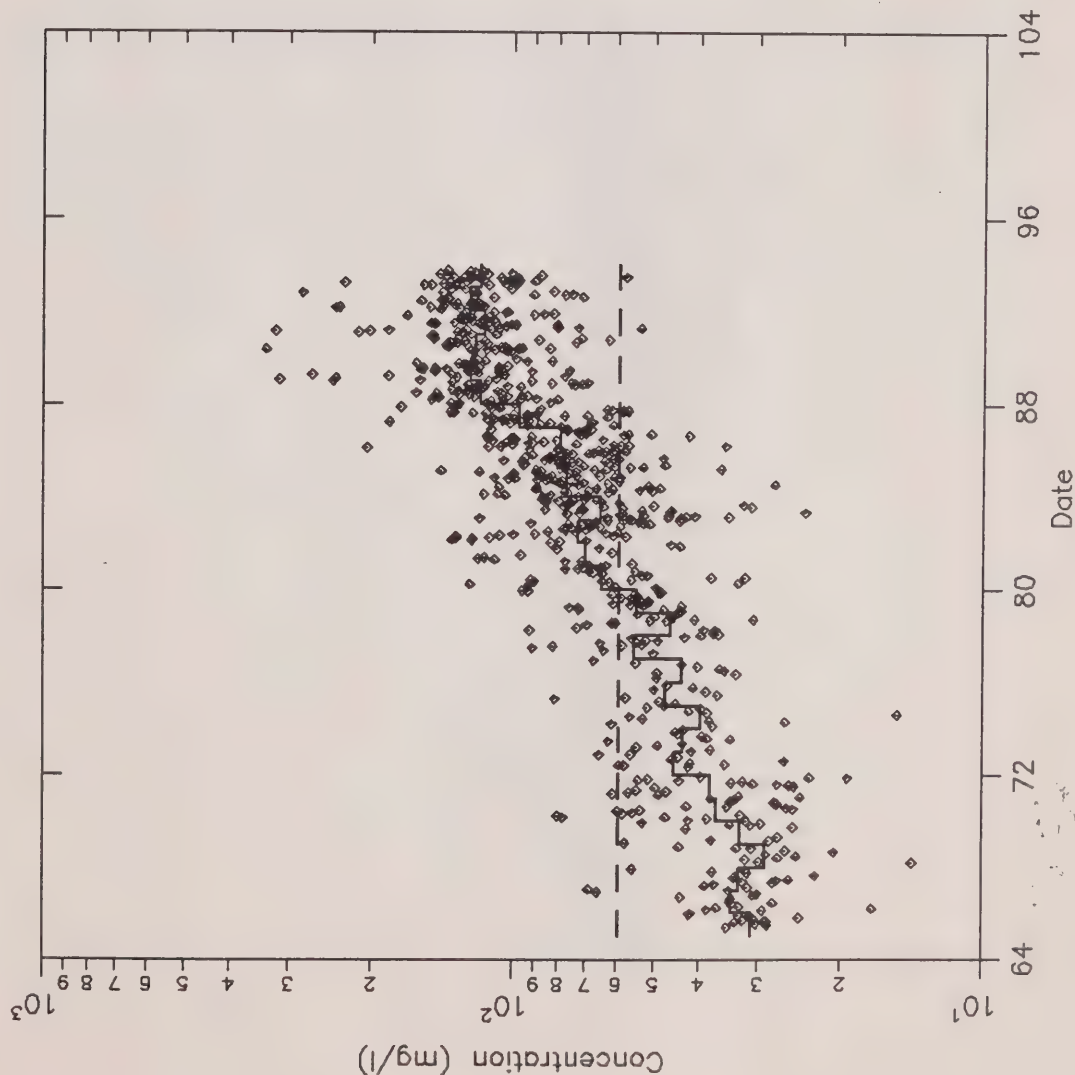
Parameter: CLIDUR

Site: 06007601902

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Chlorides mg/l

Credit R. at Hwy. 10 d/s Orangeville STP



Run #2: 16 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Annual median
- - - Geometric mean annual median
= 59.475

Maximum trend @ 1992 = 123.673
Minimum trend @ 1968 = 28.842
Trend range = 94.830

Observations = 760
Series begins @ MAY 17 1965
Series ends @ OCT 4 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

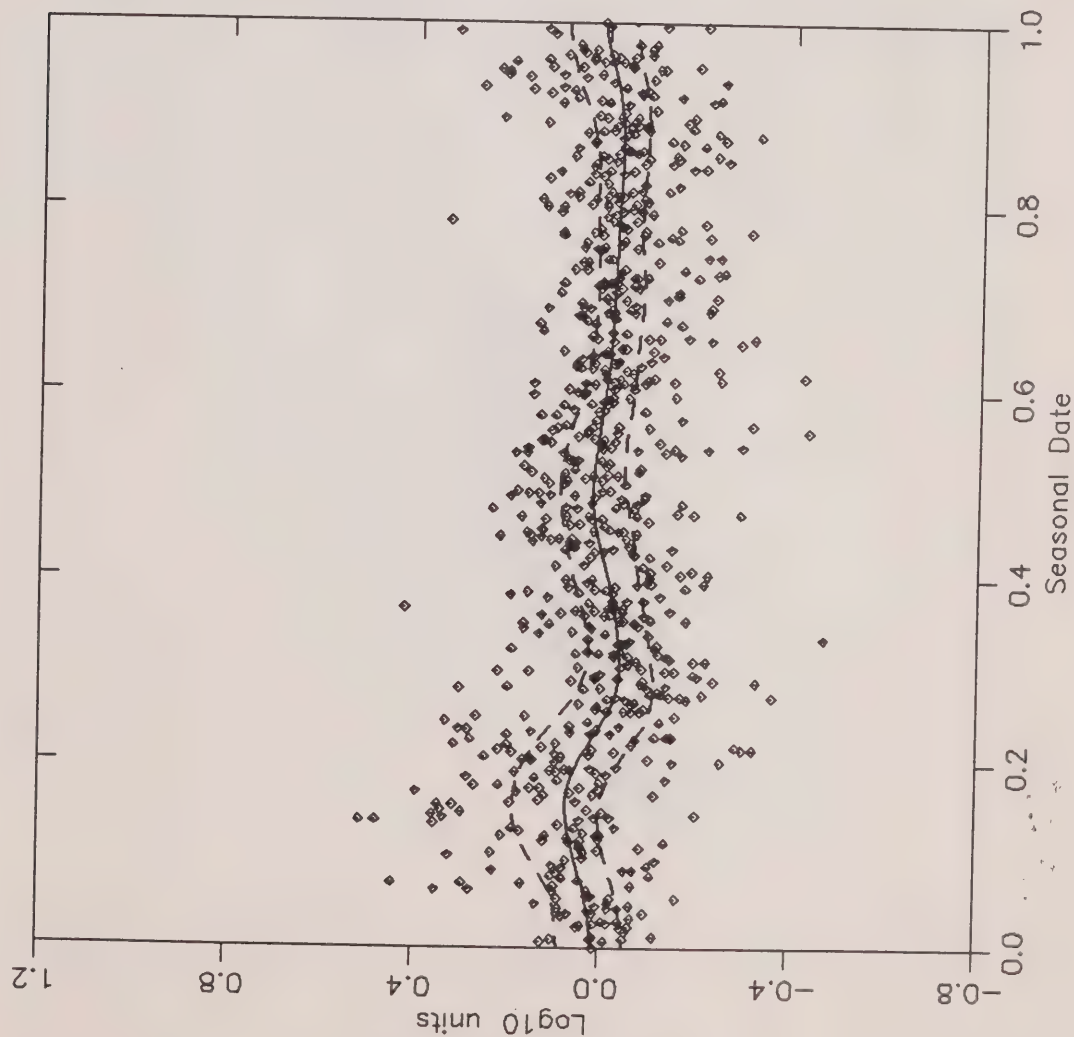
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.975
p(RHO) = 0.000 dof = 27
% Variation due to trend = 74.9

Data file: CLID006.FTM
Parameter: CLIDUR
Site: 06007600602

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Chlorides mg/l

Credit R. at Hwy. 10 d/s Orangeville STP



Run #2: 16 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

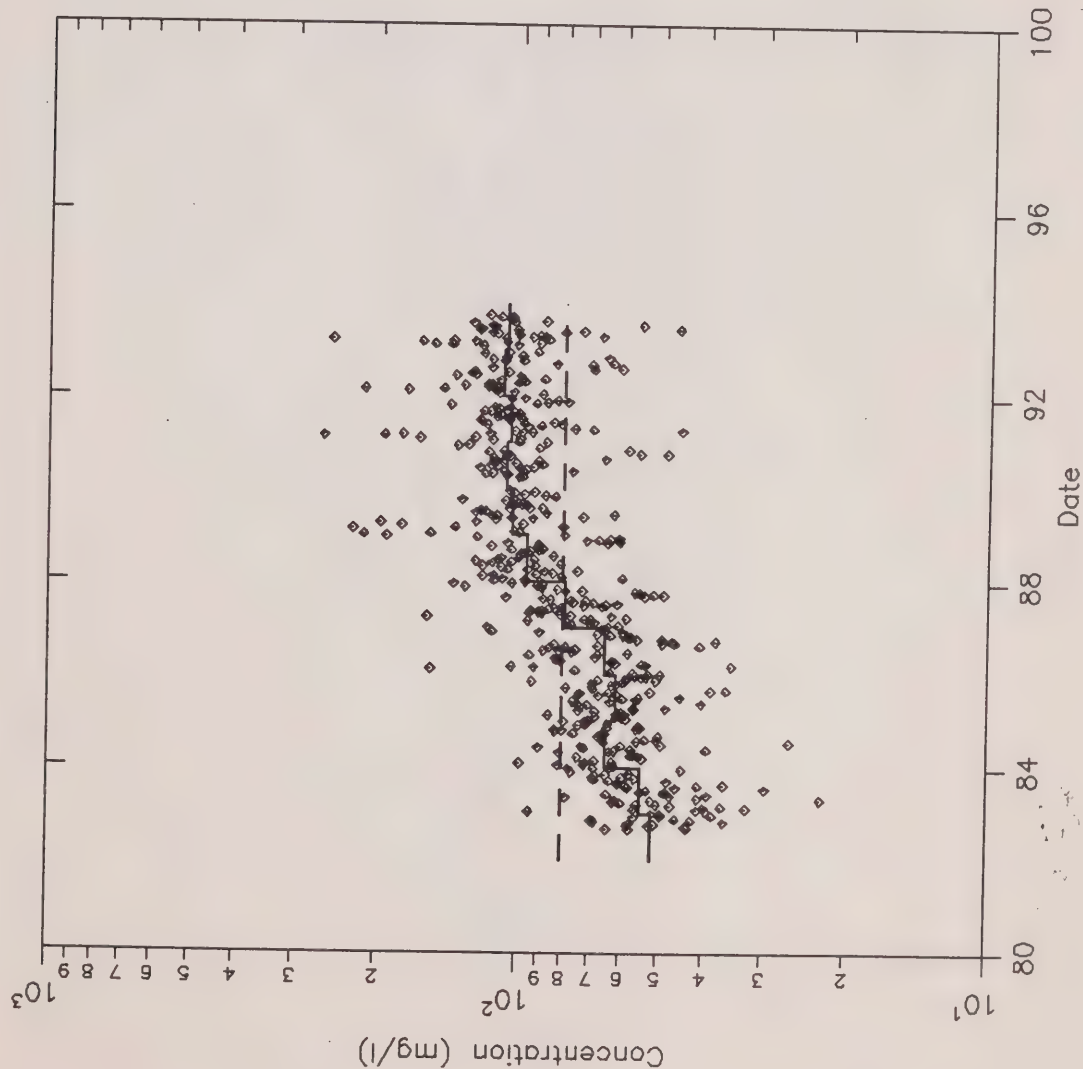
Seasonal Max @ FEB 24
Seasonal Min @ APR 24
Seasonal Amplitude = 0.111
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11
Observations = 760
Series begins @ MAY 17 1965
Series ends @ OCT 4 1993
% Variation due to seasonal = 11.0

Data file: CLUD006.FTM
Parameter: CLUDUR
Site: 06007600602

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Chlorides mg/l

Credit R. at Hwy. 10, 2nd Bridge below Orangeville



Run #2: 8 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
- - Geometric mean annual median
= 80.394

Maximum trend @ 1992 = 108.210
Minimum trend @ 1982 = 51.550
Trend range = 56.660

Observations = 500
Series begins @ SEP 8 1982
Series ends @ OCT 4 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:

Spearman RHO = 0.958

p(RHO) = 0.000 dof = 10

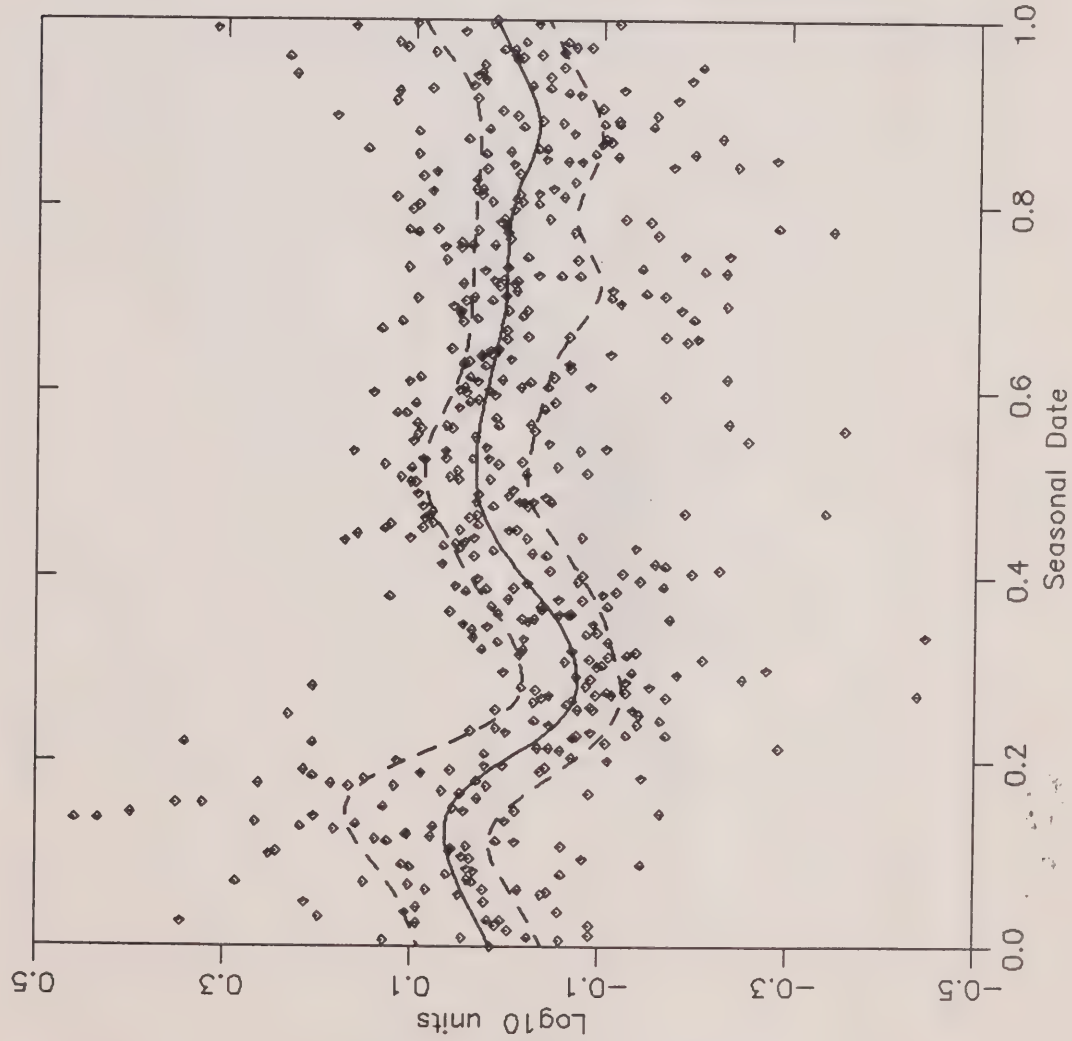
% Variation due to trend = 52.9

Data file: CLID024.FTM
Parameter: CLIDUR
Site: 06007602402

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Chlorides mg/l

Credit R. at Hwy. 10, 2nd Bridge below Orangeville



Run #2: 8 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ FEB 13
Seasonal Min @ APR 16
Seasonal Amplitude = 0.140

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 500
Series begins @ SEP 8 1982
Series ends @ OCT 4 1993

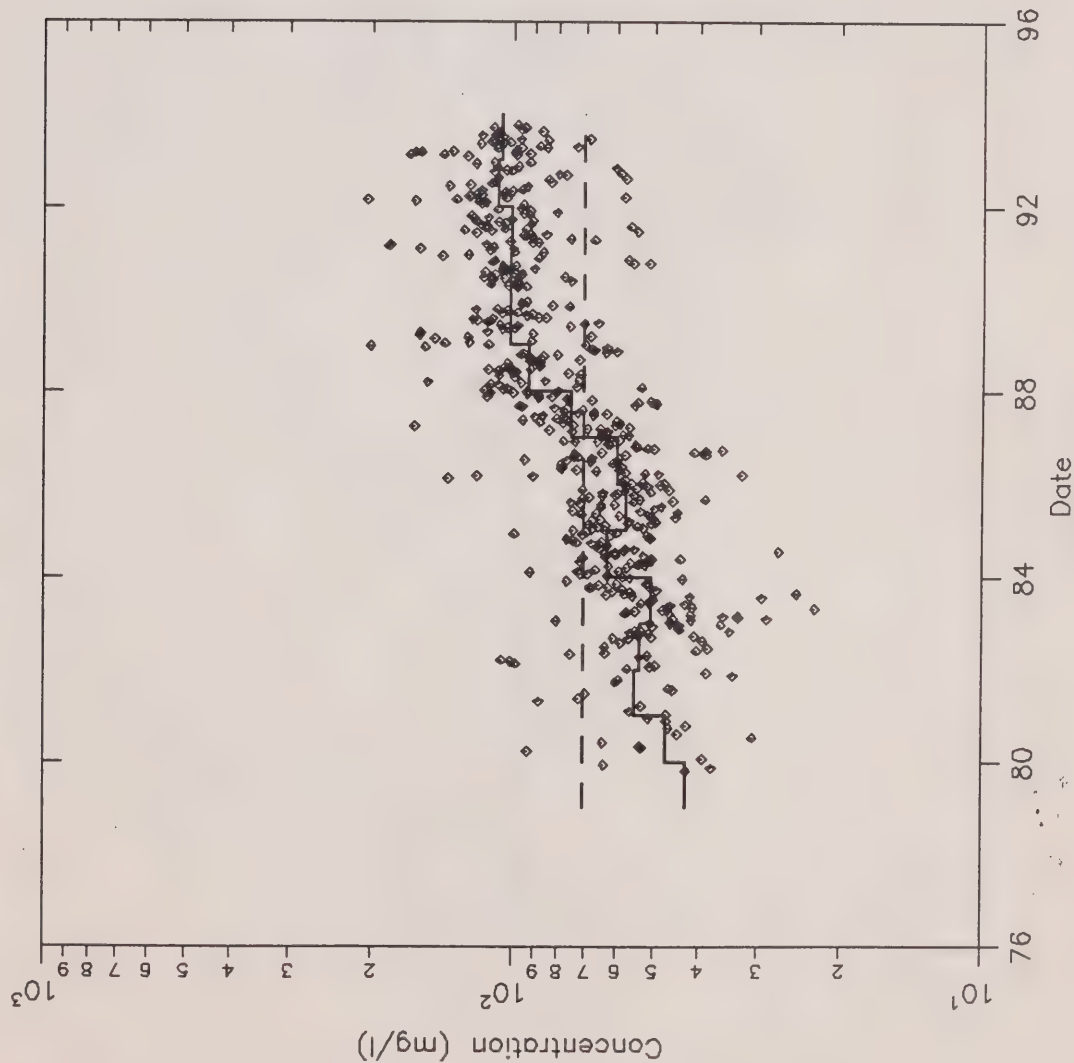
% Variation due to seasonal = 15.9

Data file: CLID024.FTM
Parameter: CLIDUR
Site: 06007602402

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Chlorides mg/l

Credit R. at Melville



Run #2: 14 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 70.385

Maximum trend @ 1992 = 107.874
Minimum trend @ 1979 = 42.673
Trend range = 65.201

Observations = 538
Series begins @ OCT 23 1979
Series ends @ OCT 4 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

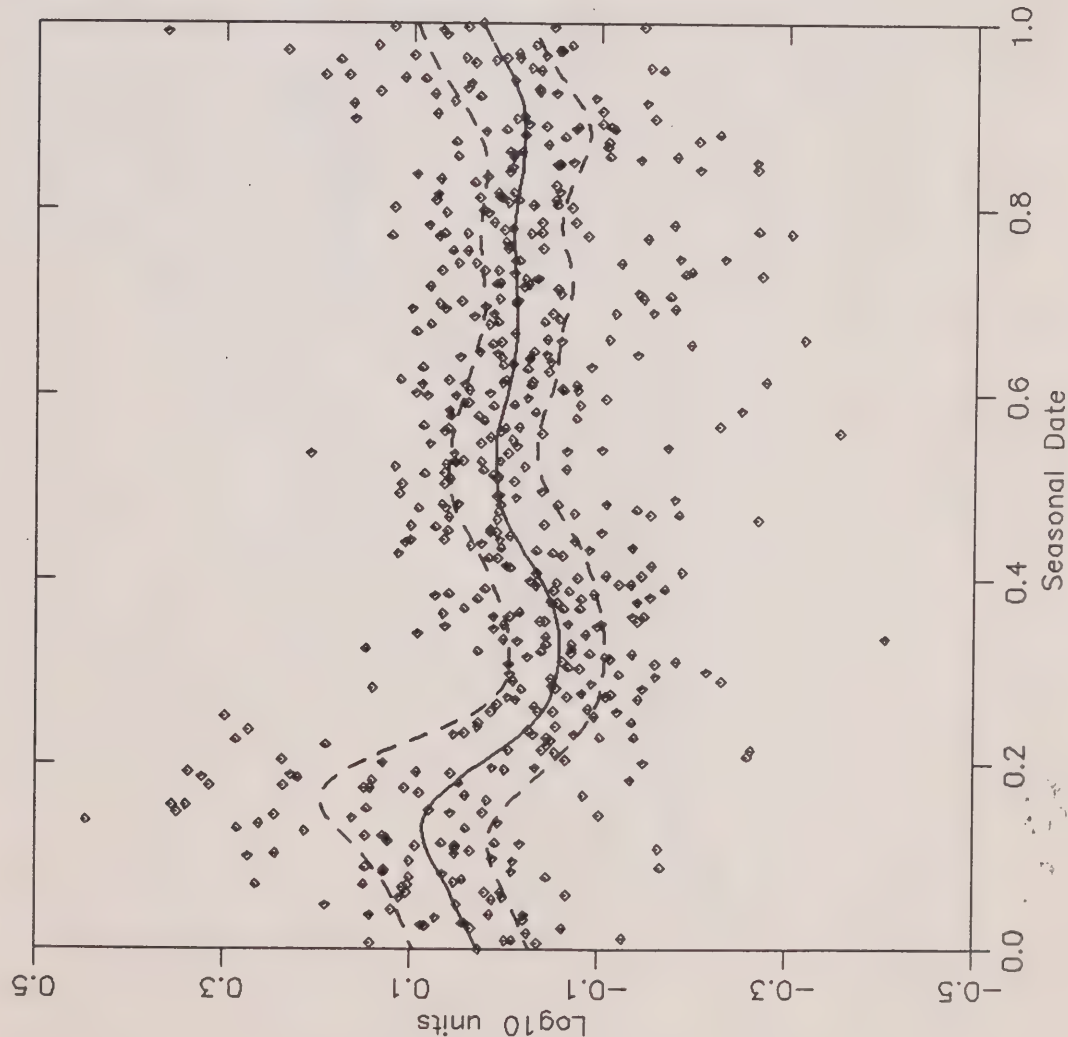
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.957
 $p(\text{RHO}) = 0.000$ dof = 13
% Variation due to trend = 59.9

Data file: CLID023.FTM
Parameter: CLIDUR
Site: 06007602302

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Chlorides mg/l

Credit R. at Melville



Run #2: 14 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ FEB 17
Seasonal Min @ MAY 1
Seasonal Amplitude = 0.146
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 538
Series begins @ OCT 23 1979
Series ends @ OCT 4 1993

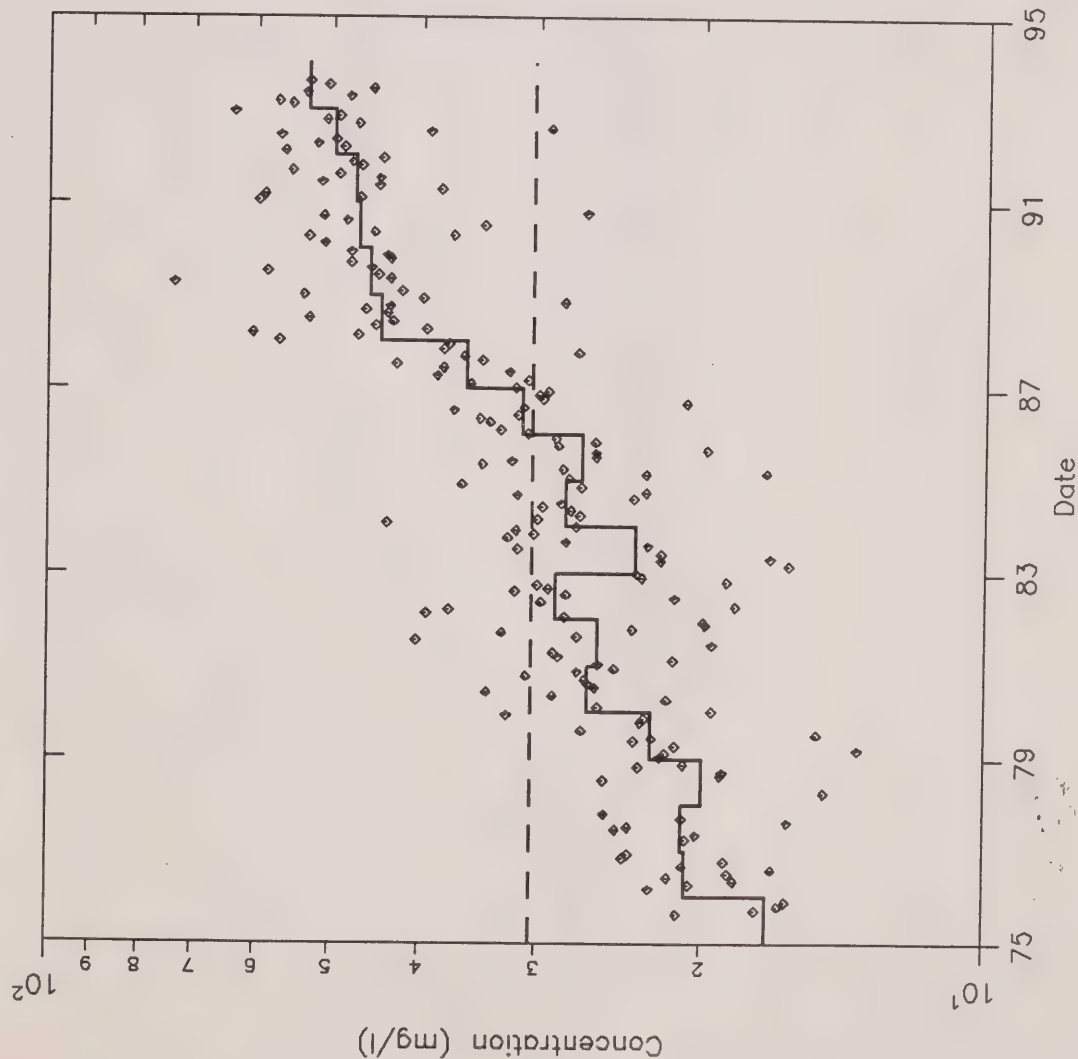
% Variation due to seasonal = 17.8

Data file: CLUD023.FTM
Parameter: CLUDUR
Site: 06007602302

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Chlorides mg/l

Credit R. at 20th Sideroad, Caledon Twp.



Run #2: 4 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median

-- Geometric mean annual median
= 30.401

Maximum trend @ 1993 = 52.990
Minimum trend @ 1975 = 17.000
Trend range = 35.989

Observations = 191

Series begins @ AUG 20 1975

Series ends @ AUG 12 1993

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:

Spearman RHO = 0.972

p(RHO) = 0.000 dof = 17

% Variation due to trend = 75.5

Data file: CLID0018.FTM

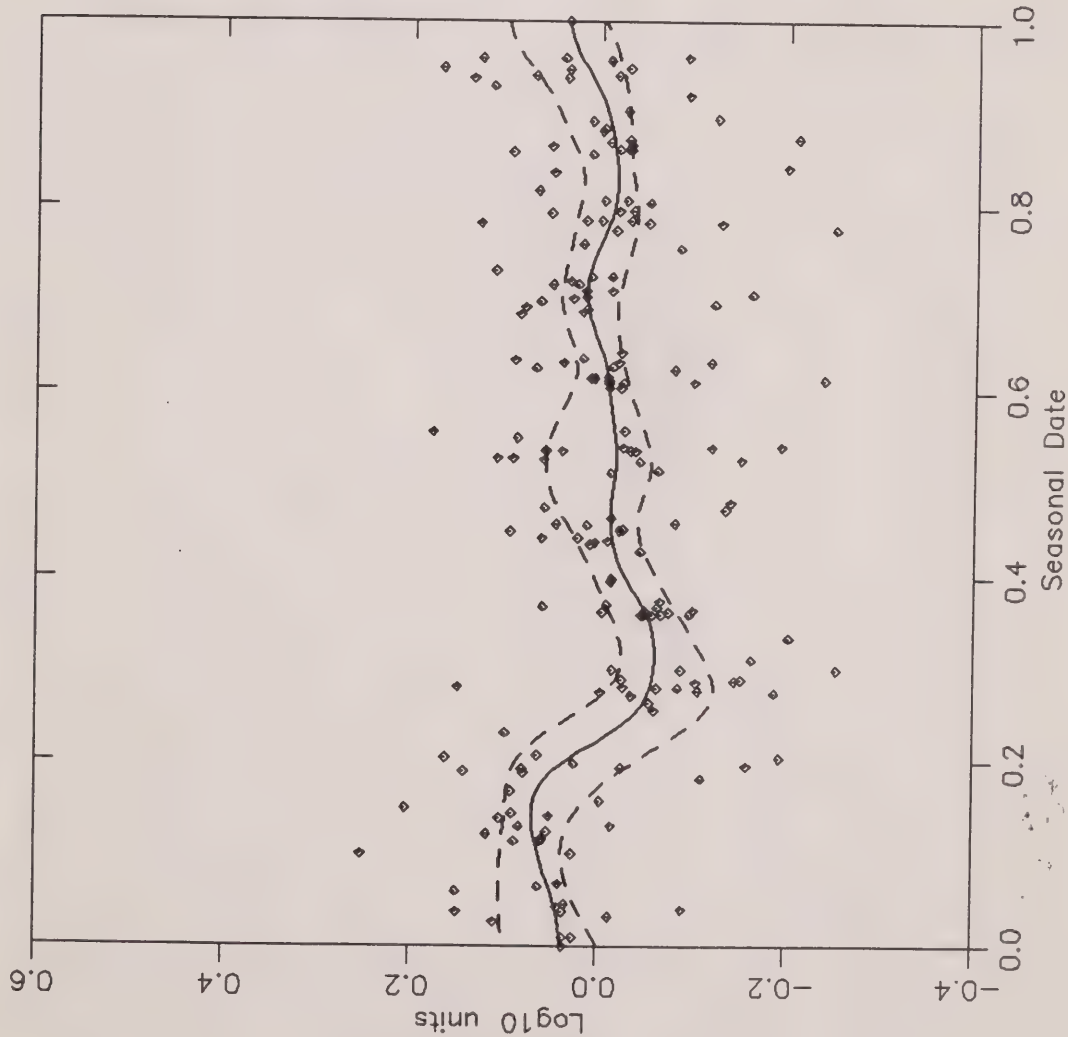
Parameter: CLIDUR

Site: 06007601802

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Chlorides mg/l

Credit R. at 20th Sideroad, Caledon Twp.



Run #2: 4 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ FEB 24
Seasonal Min @ APR 24
Seasonal Amplitude = 0.130

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 191

Series begins @ AUG 20 1975

Series ends @ AUG 12 1993

% Variation due to seasonal = 20.2

Data file: CLID018.FTM

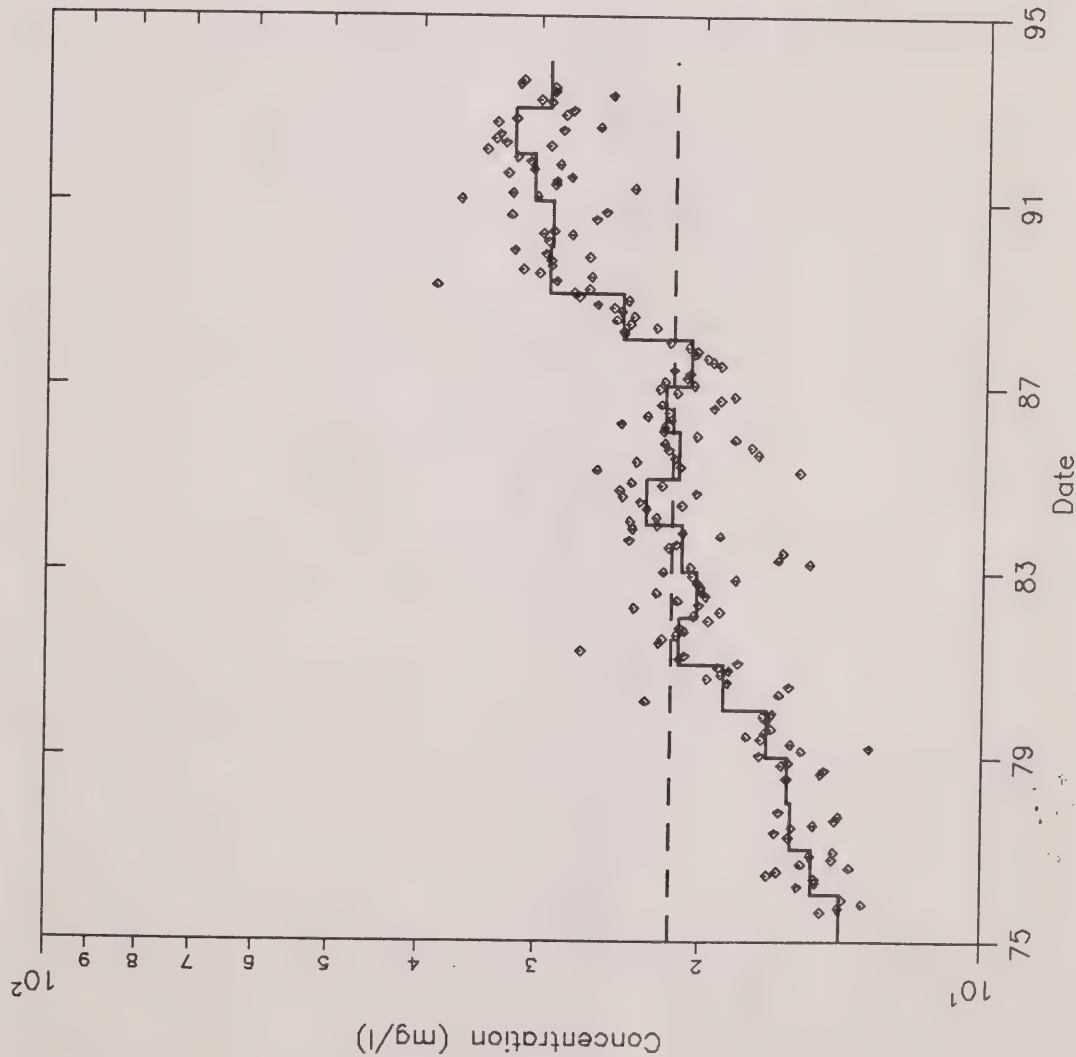
Parameter: CLIDUR

Site: 06007601802

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Chlorides mg/l

Credit R. Erin Br. at Wellington/Peel Cty. Boundary



Run #2: 9 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 21.458

Maximum trend @ 1992 = 31.893
Minimum trend @ 1975 = 14.111
Trend range = 17.782

Observations = 184
Series begins @ AUG 20 1975
Series ends @ AUG 12 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

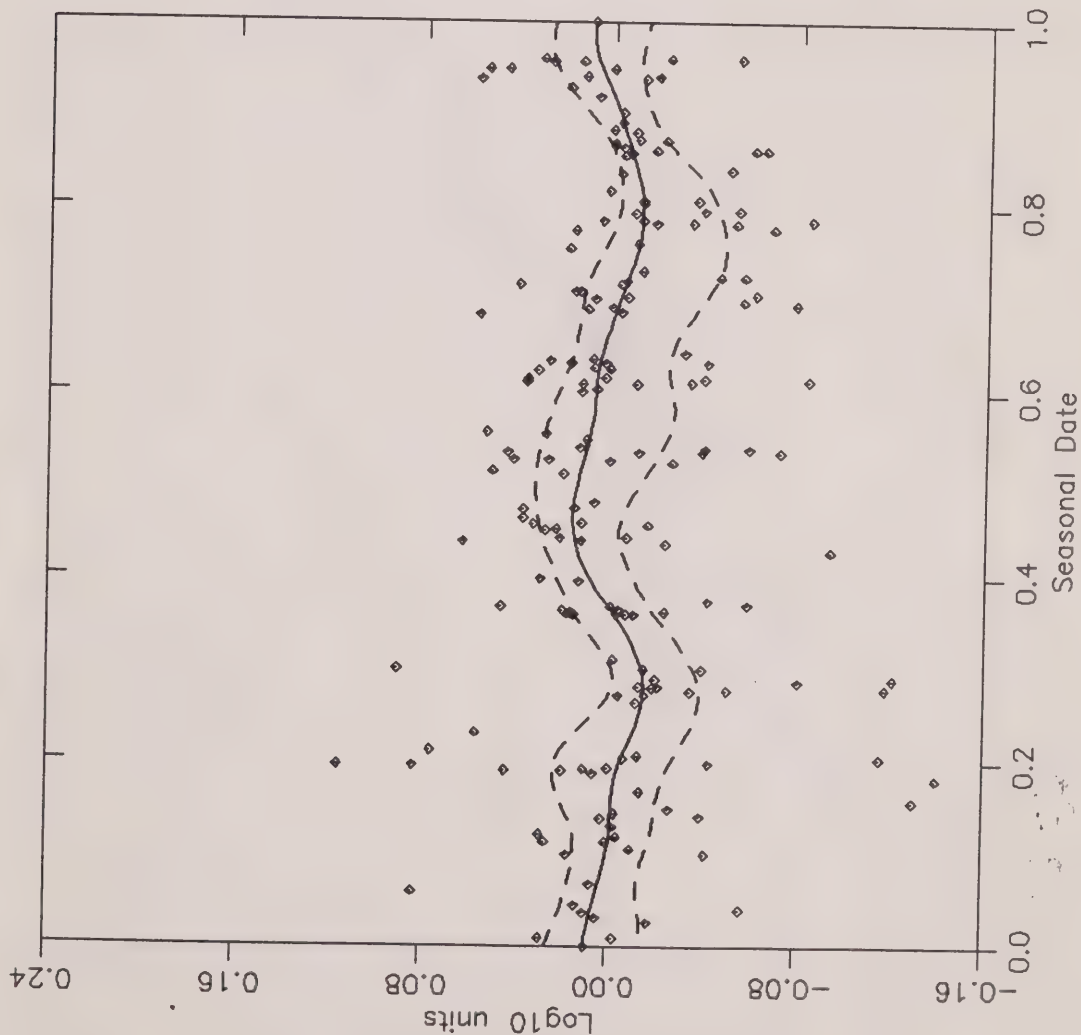
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.951
p(RHO) = 0.000 dof = 17
% Variation due to trend = 86.7

Data file: CLID015.FTM
Parameter: CLUDUR
Site: 06007601502

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Chlorides mg/l

Credit R. Erin Br. at Wellington/Peel Cty. Boundary



Run #2: 9 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JUN 17
Seasonal Min @ APR 13
Seasonal Amplitude = 0.031

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 184

Series begins @ AUG 20 1975

Series ends @ AUG 12 1993

% Variation due to seasonal = 7.3

Data file: CLID015.FTM

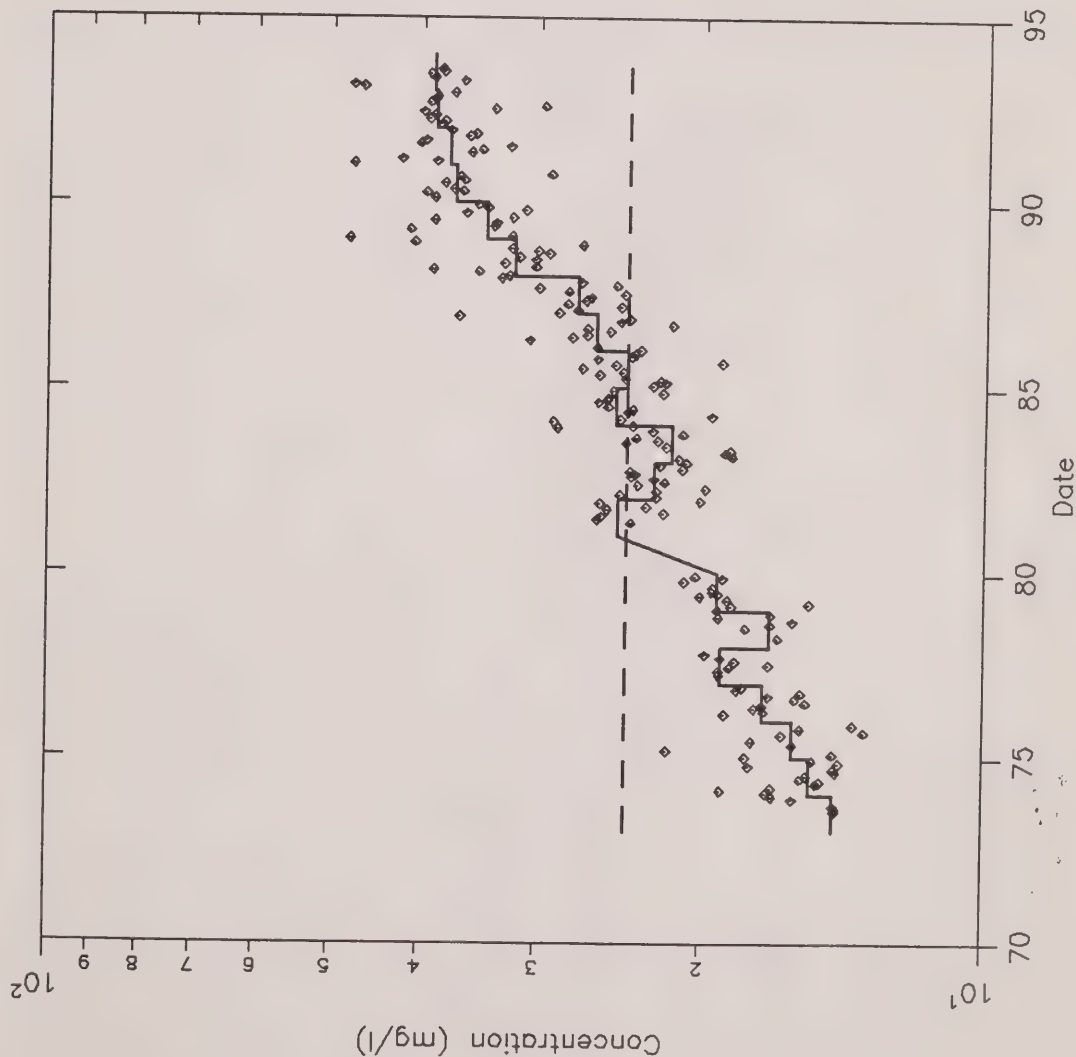
Parameter: CLIDUR

Site: 06007601502

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Chlorides mg/l

Credit R. at Cty. Rd. 9, Terra Cotta



Run #2: 7 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 24.066

Maximum trend @ 1993 = 38.996
Minimum trend @ 1973 = 14.418
Trend range = 24.577

Observations = 199
Series begins @ JUL 25 1973
Series ends @ AUG 12 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

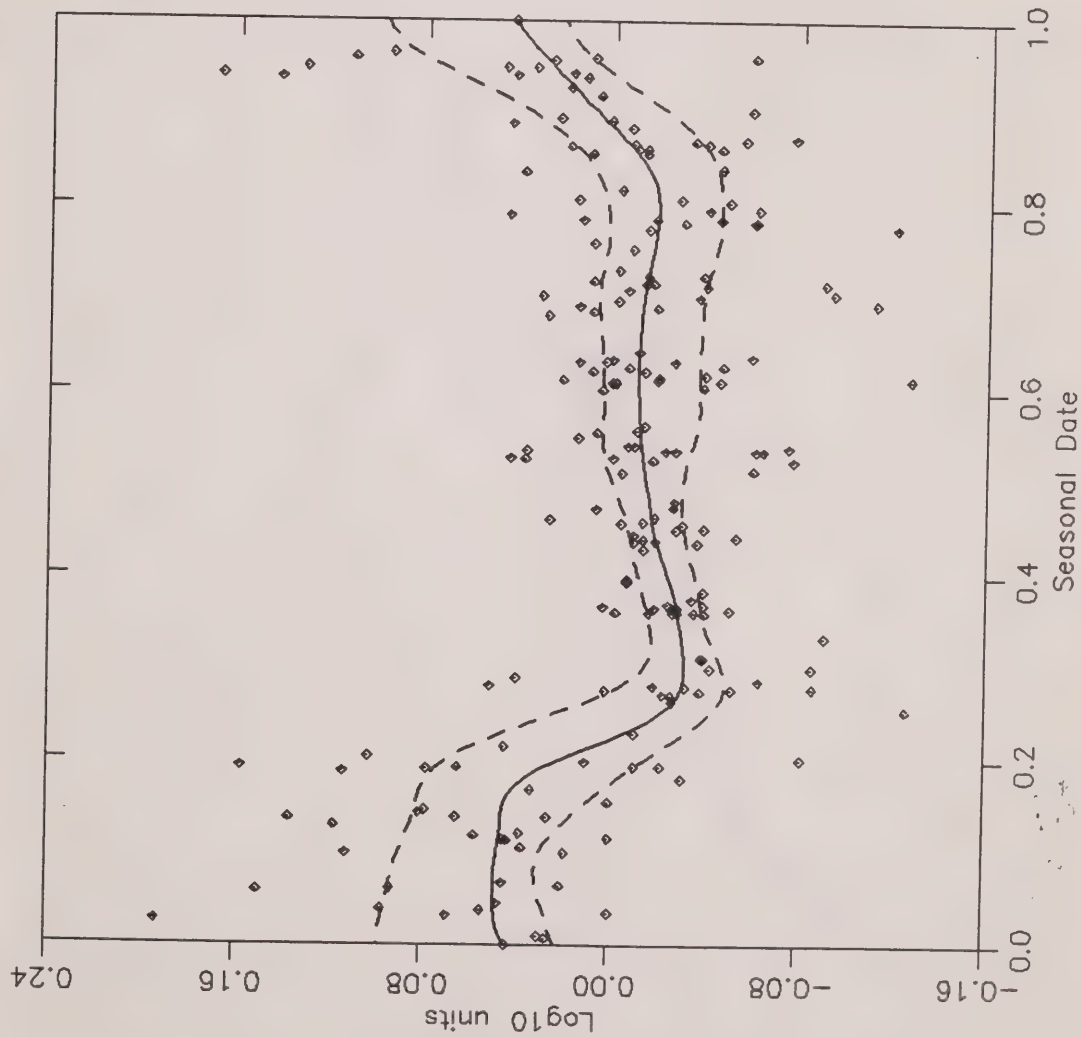
TREND TEST ON ANNUAL MEDIAN:
Spearman RHO = 0.982
p(RHO) = 0.000 dof = 18
% Variation due to trend = 90.5

Data file: CLID010.FTM
Parameter: CLIDUR
Site: 06007601002

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Chlorides mg/l

Credit R. at Cty. Rd. 9, Terra Cotta



Run #2: 7 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JAN 19
Seasonal Min @ APR 20
Seasonal Amplitude = 0.080

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 199

Series begins @ JUL 25 1973

Series ends @ AUG 12 1993

% Variation due to seasonal = 37.8

Data file: CLUD010.FTM

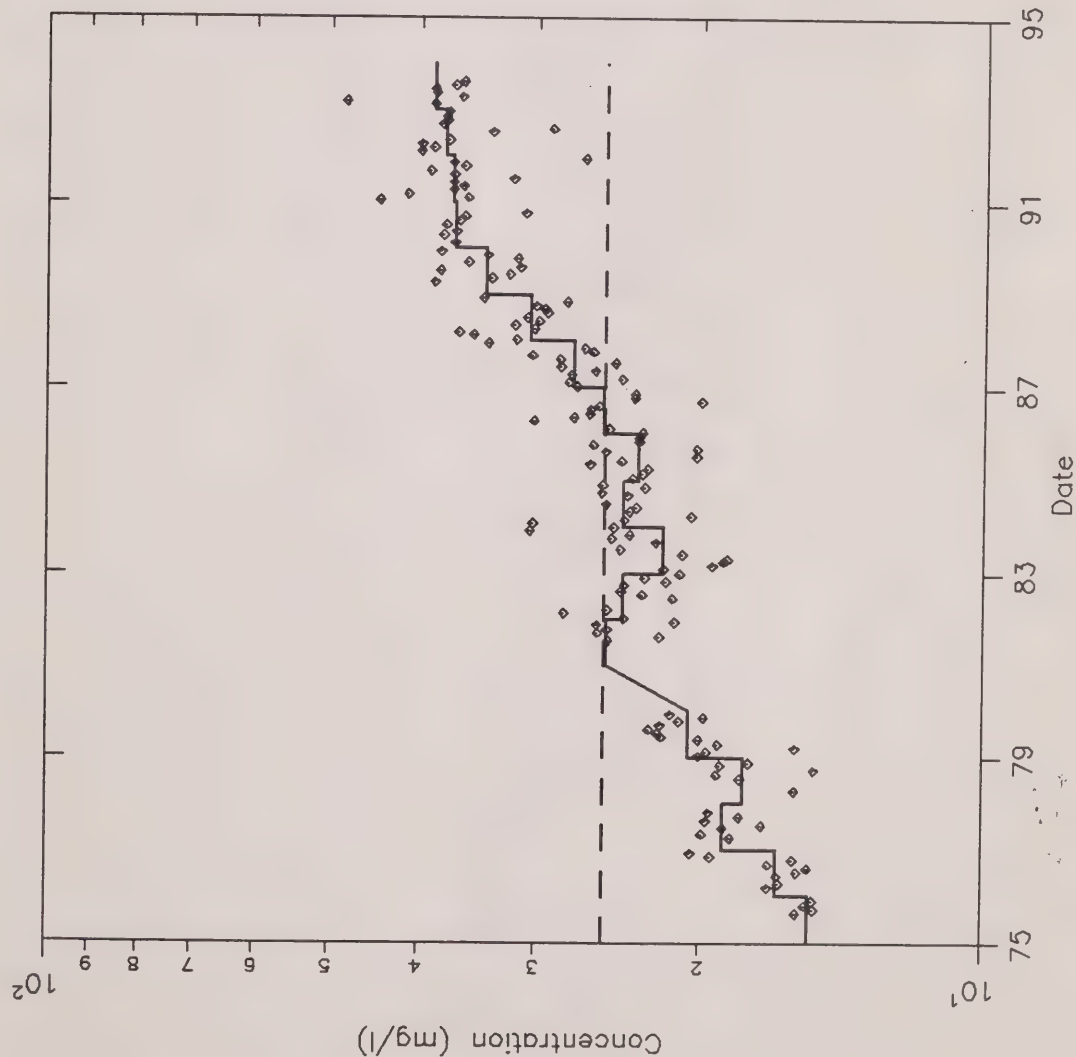
Parameter: CLUDUR

Site: 06007601002

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Chlorides mg/l

Credit R. at 22nd Sideroad, Glen Williams



Run #2: 12 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 25.377

Maximum trend @ 1993 = 38.687
Minimum trend @ 1975 = 15.280
Trend range = 23.407

Observations = 165
Series begins @ AUG 20 1975
Series ends @ AUG 12 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

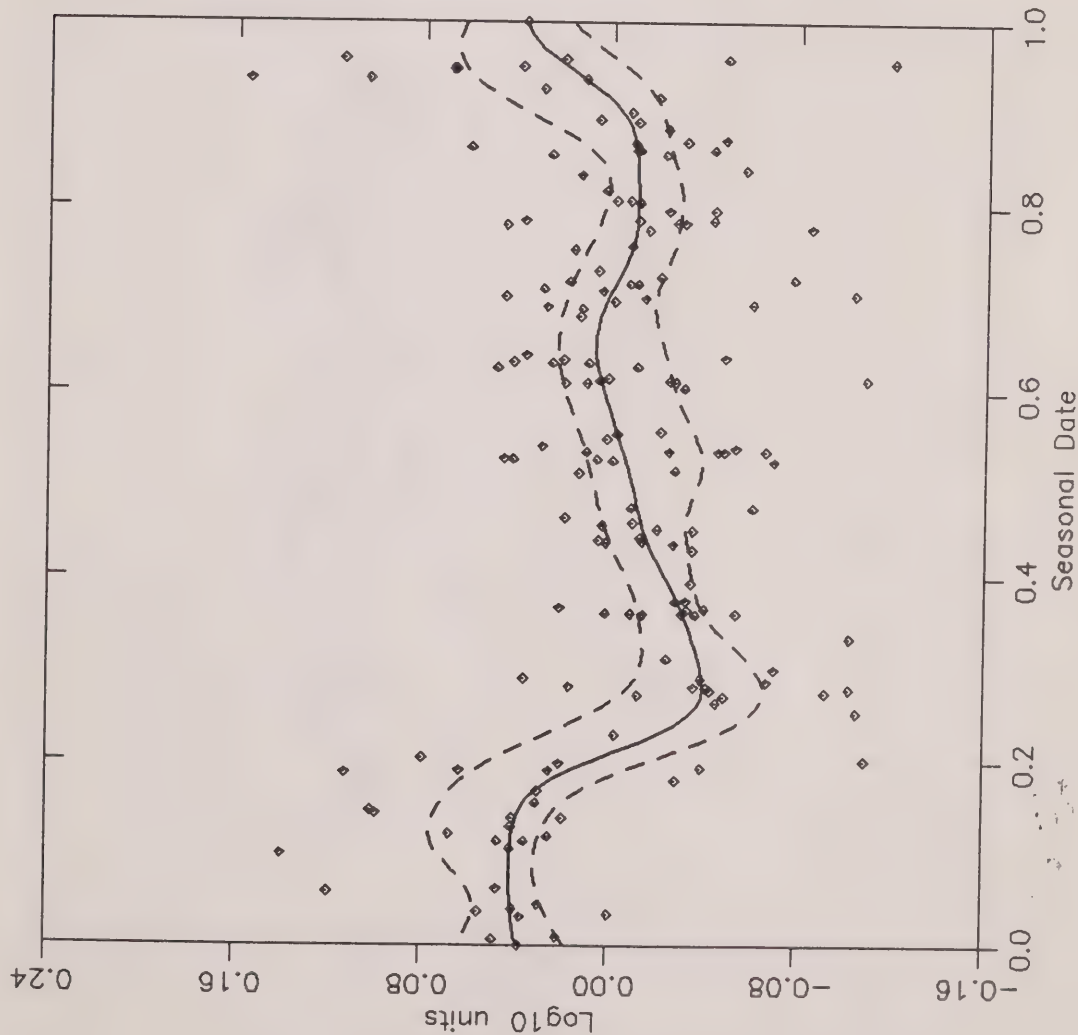
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.965
 $p(RHO) = 0.000$ dof = 16
% Variation due to trend = 88.7

Data file: CLID013.FTM
Parameter: CLIDUR
Site: 06007601302

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Chlorides mg/l

Credit R. at 22nd Sideroad, Glen Williams



Run #2: 12 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
-- 1st & 3rd quartiles

Seasonal Max @ JAN 30
Seasonal Min @ APR 13
Seasonal Amplitude = 0.082

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 165

Series begins @ AUG 20 1975

Series ends @ AUG 12 1993

% Variation due to seasonal = 30.1

Data file: CLID013.FTM

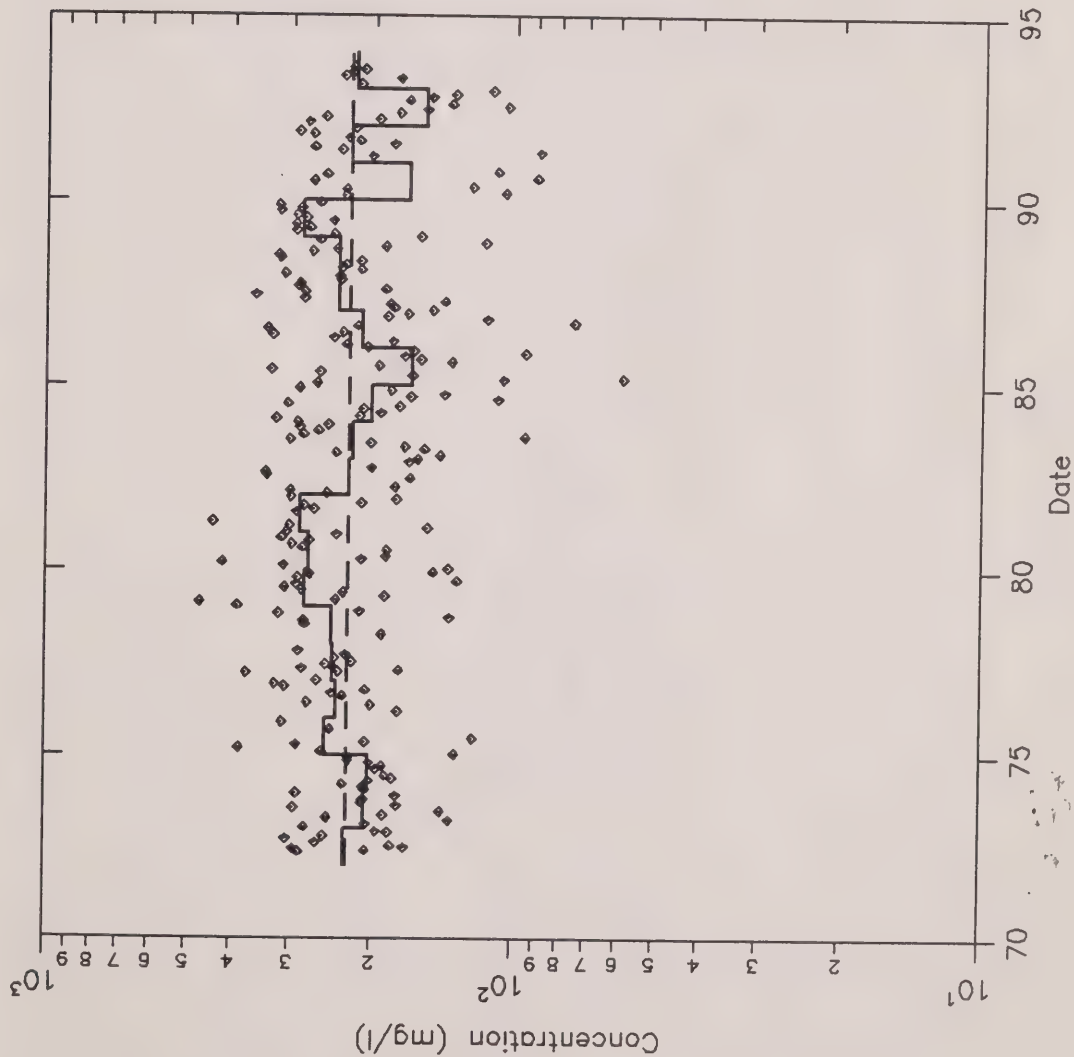
Parameter: CLIDUR

Site: 06007601302

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Chlorides mg/l

Black Ck. at 1st. Conc. u/s from Limehouse



Run #2: 6 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Annual median

-- Geometric mean annual median
= 224.368

Maximum trend @ 1981 = 285.661
Minimum trend @ 1992 = 155.414
Trend range = 130.247

Observations = 226

Series begins @ MAY 17 1972

Series ends @ AUG 12 1993

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:

Spearman RHO = -0.286

p(RHO) = 0.196 dof = 20

% Variation due to trend = 17.7

Data file: CLID008.FTM

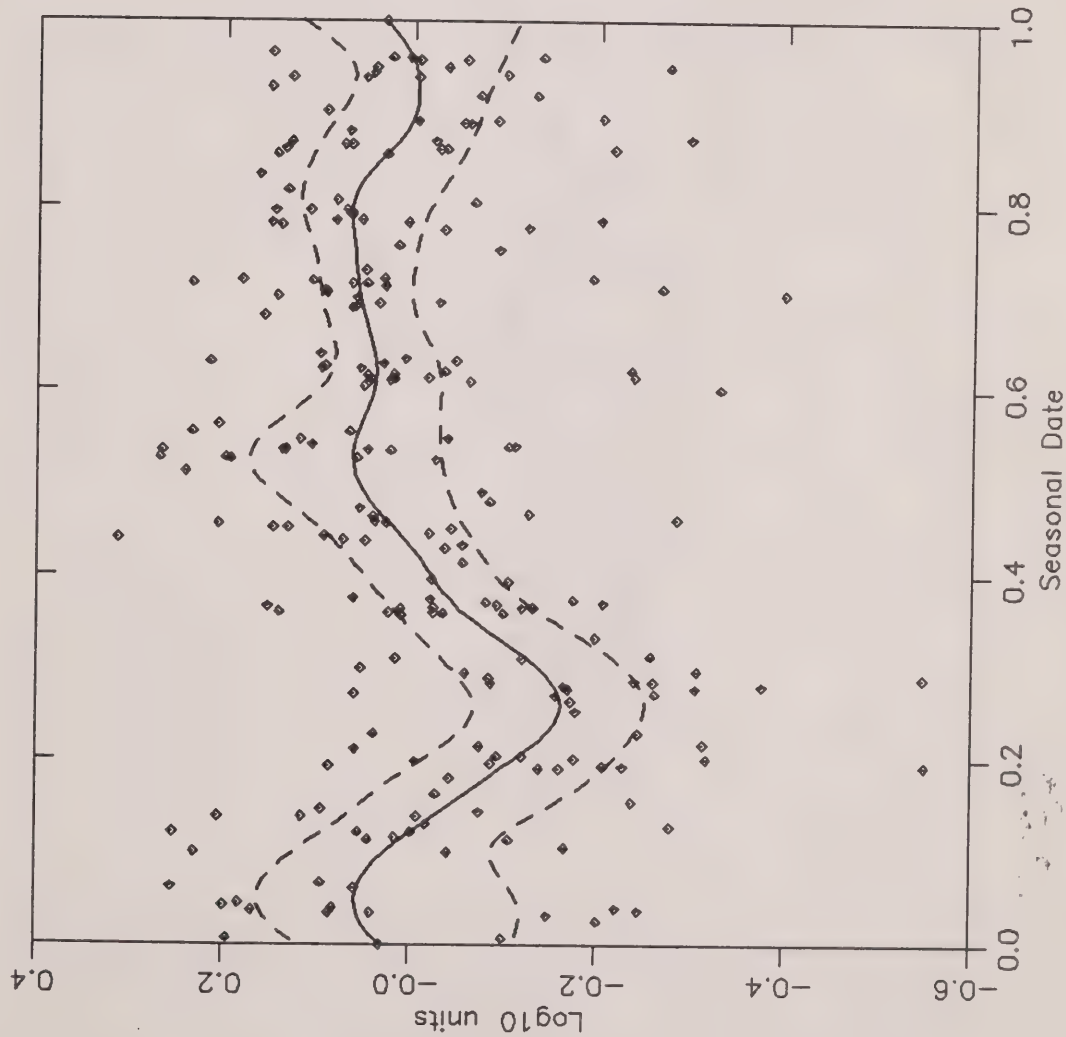
Parameter: CLIDUR

Site: 06007600802

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Chlorides mg/l

Black Ck. at 1st. Conc. u/s from Limehouse



Run #2: 6 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Seasonal median
-- 1st & 3rd quartiles

Seasonal Max @ OCT 16
Seasonal Min @ APR 5
Seasonal Amplitude = 0.227

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 226

Series begins @ MAY 17 1972

Series ends @ AUG 12 1993

% Variation due to seasonal = 23.0

Data file: CLID008.FTM

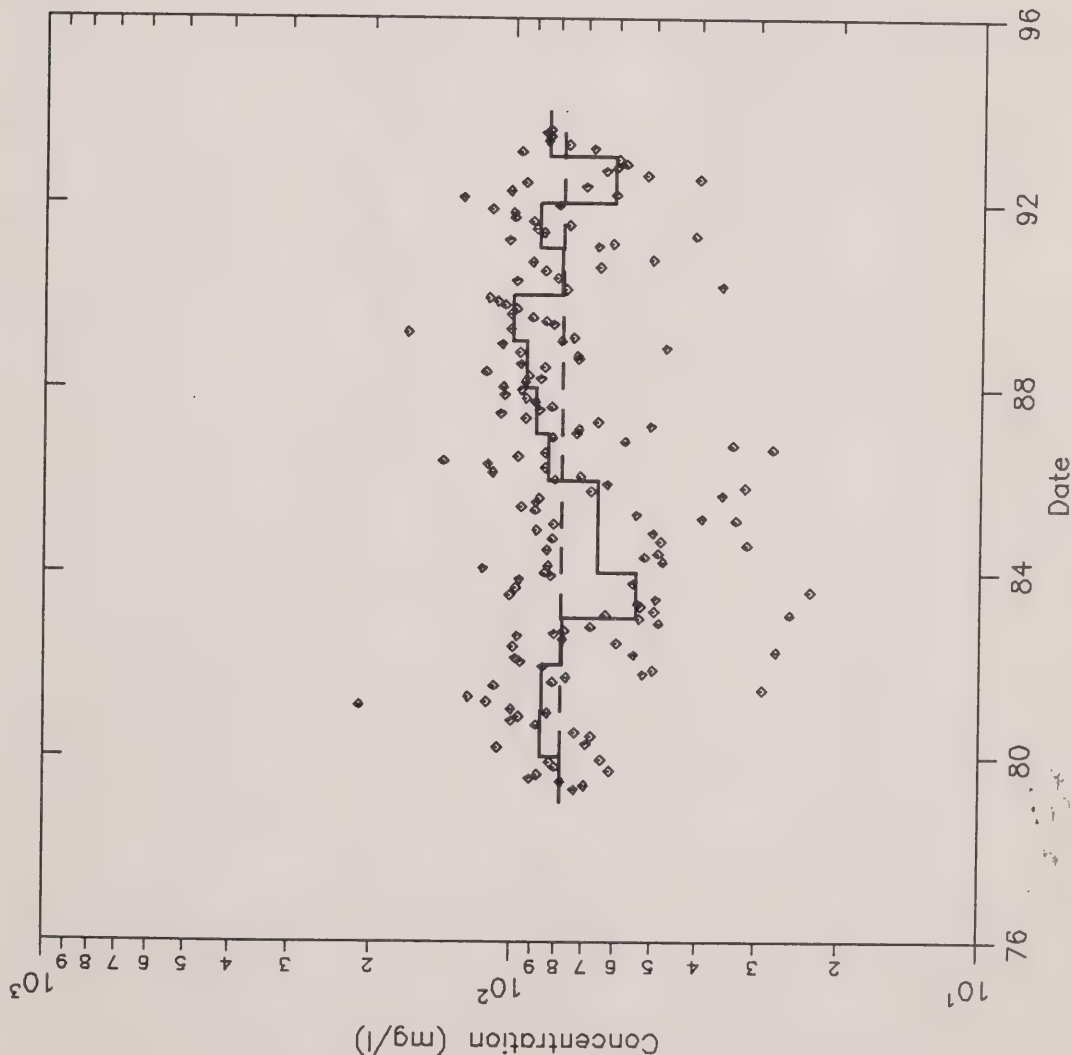
Parameter: CLIDUR

Site: 06007600802

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Chlorides mg/l

Credit R. West Br. at Cty. Rd. 13, Georgetown



Run #1:

Run date: December 13, 1993

pgm = TRX

— Annual median

- - Geometric mean annual median
= 78.368

Maximum trend @ 1989 = 100.104

Minimum trend @ 1983 = 53.994

Trend range = 46.110

Observations = 163

Series begins @ APR 19 1979

Series ends @ AUG 12 1993

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIAN:

Spearman RHO = 0.206

p(RHO) = 0.462 dof = 13

% Variation due to trend = 15.0

Data file: CLID022.FTM

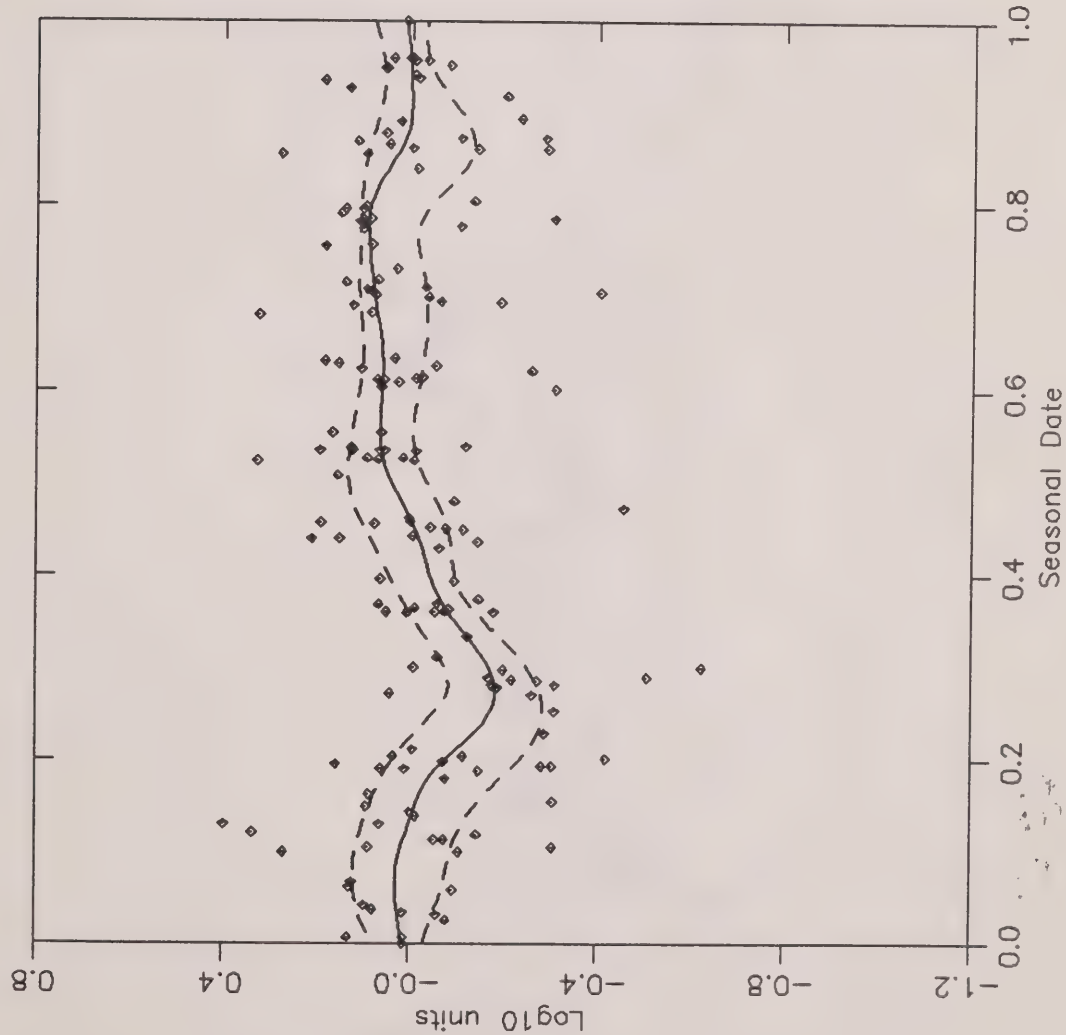
Parameter: CUDUR

Site: 06007602202

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Chlorides mg/l

Credit R. West Br. at Cty. Rd. 13, Georgetown



Run #1:

Run date: December 13, 1993

pgm = TRX

— Seasonal median

- - - 1st & 3rd quartiles

Seasonal Max @ OCT 12

Seasonal Min @ APR 9

Seasonal Amplitude = 0.276

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

Observations = 163

Series begins @ APR 19 1979

Series ends @ AUG 12 1993

% Variation due to seasonal = 21.1

Data file: CLID022.FTM

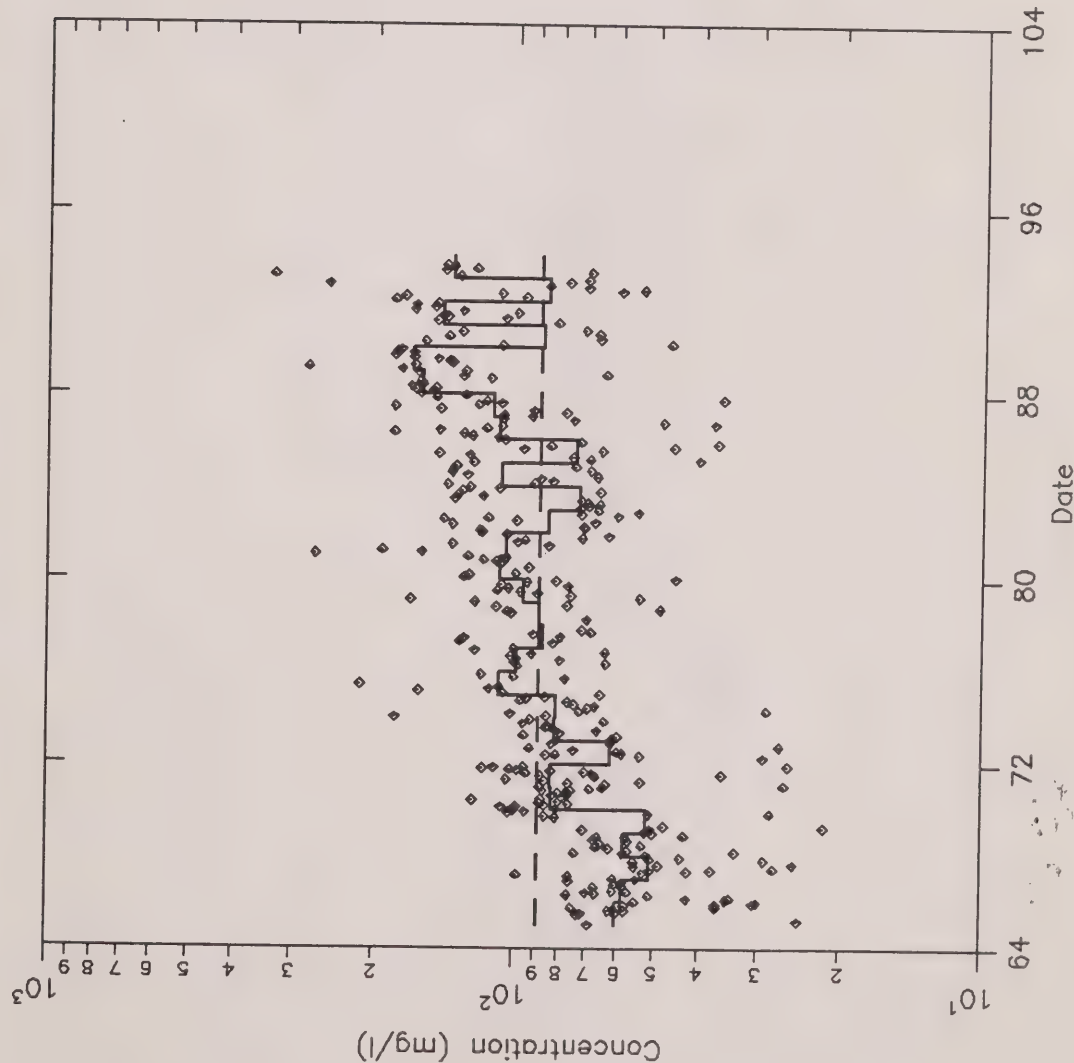
Parameter: CLIDUR

Site: 06007602202

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Chlorides mg/l

Credit R. West Br. at Hwy. 7, Norval



Run #2: 4 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Annual median
- - - Geometric mean annual median
= 88.643

Maximum trend @ 1989 = 166.269
Minimum trend @ 1967 = 50.830
Trend range = 115.439

Observations = 342
Series begins @ JAN 19 1965
Series ends @ AUG 12 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

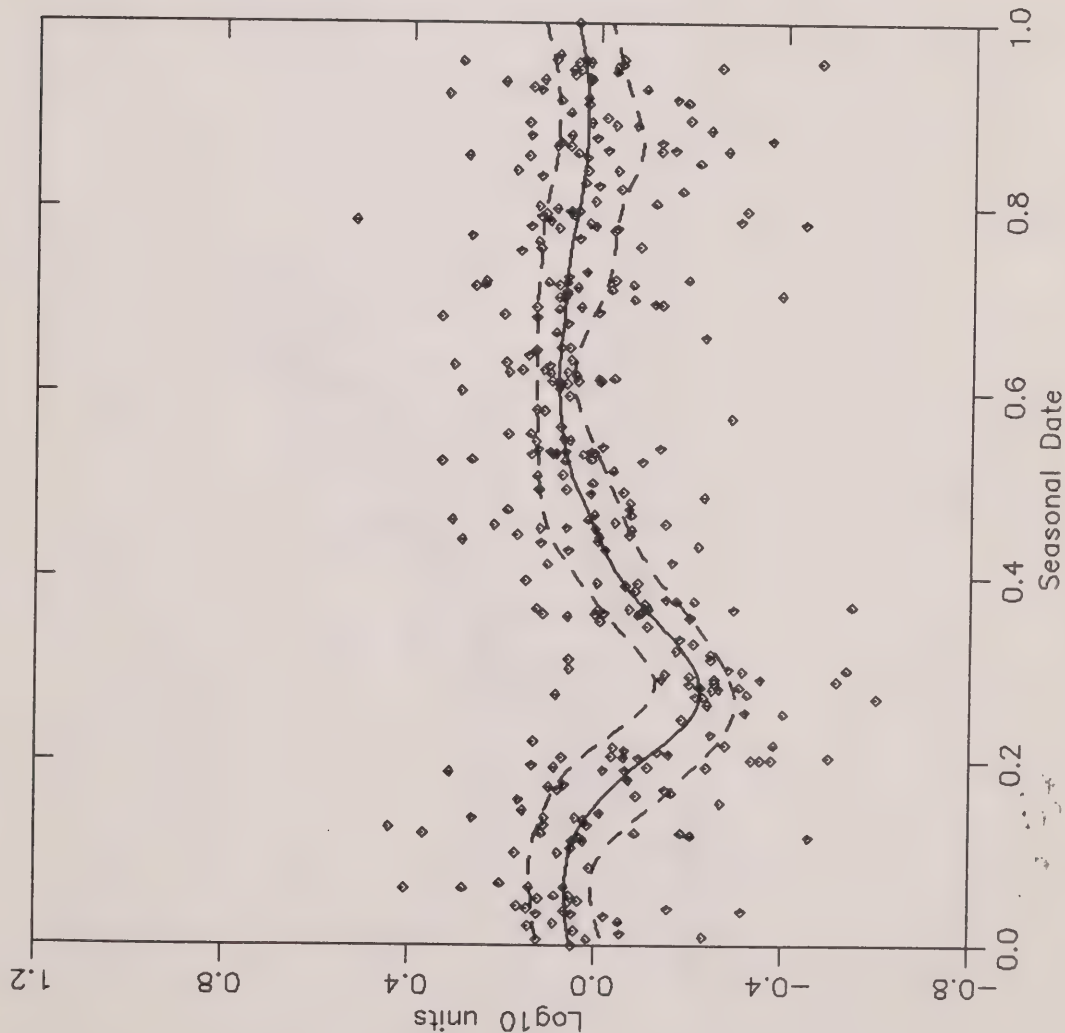
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.745
p(RHO) = 0.000 dof = 27
% Variation due to trend = 44.5

Data file: CLID004.FTM
Parameter: CLUDUR
Site: 06007600402

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Chlorides mg/l

Credit R. West Br. at Hwy. 7, Norval



Run #2: 4 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ AUG 11
Seasonal Min @ APR 13
Seasonal Amplitude = 0.307

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 342

Series begins @ JAN 19 1965
Series ends @ AUG 12 1993

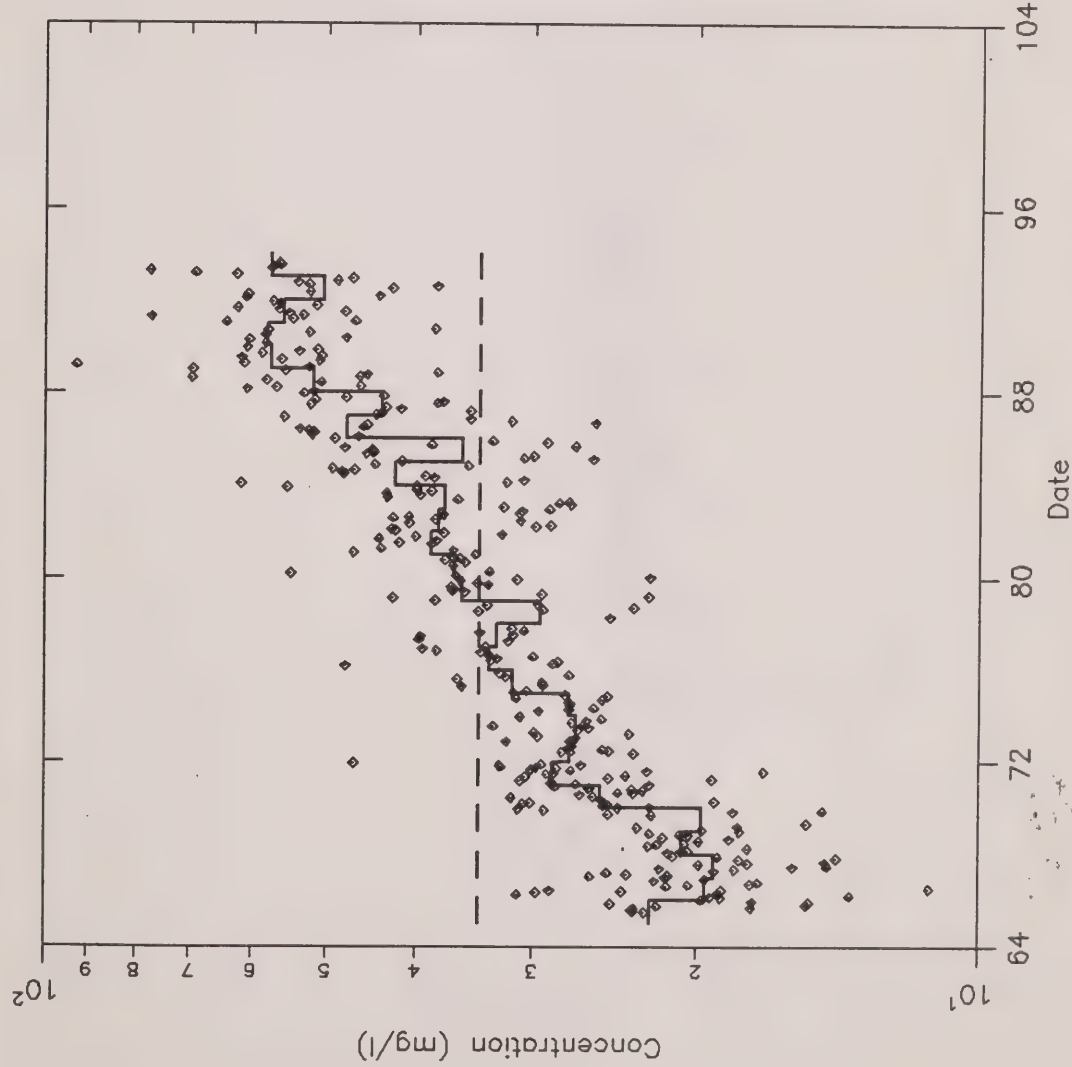
% Variation due to seasonal = 28.0

Data file: CLID0004.FTM
Parameter: CLIDUR
Site: 06007600402

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Chlorides mg/l

Credit R. at Hwy. 7, Norval



Run #2: 9 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Annual median
- - - Geometric mean annual median
= 34.239

Maximum trend @ 1990 = 57.939
Minimum trend @ 1967 = 19.170
Trend range = 38.769

Observations = 336
Series begins @ JUN 30 1965
Series ends @ AUG 12 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

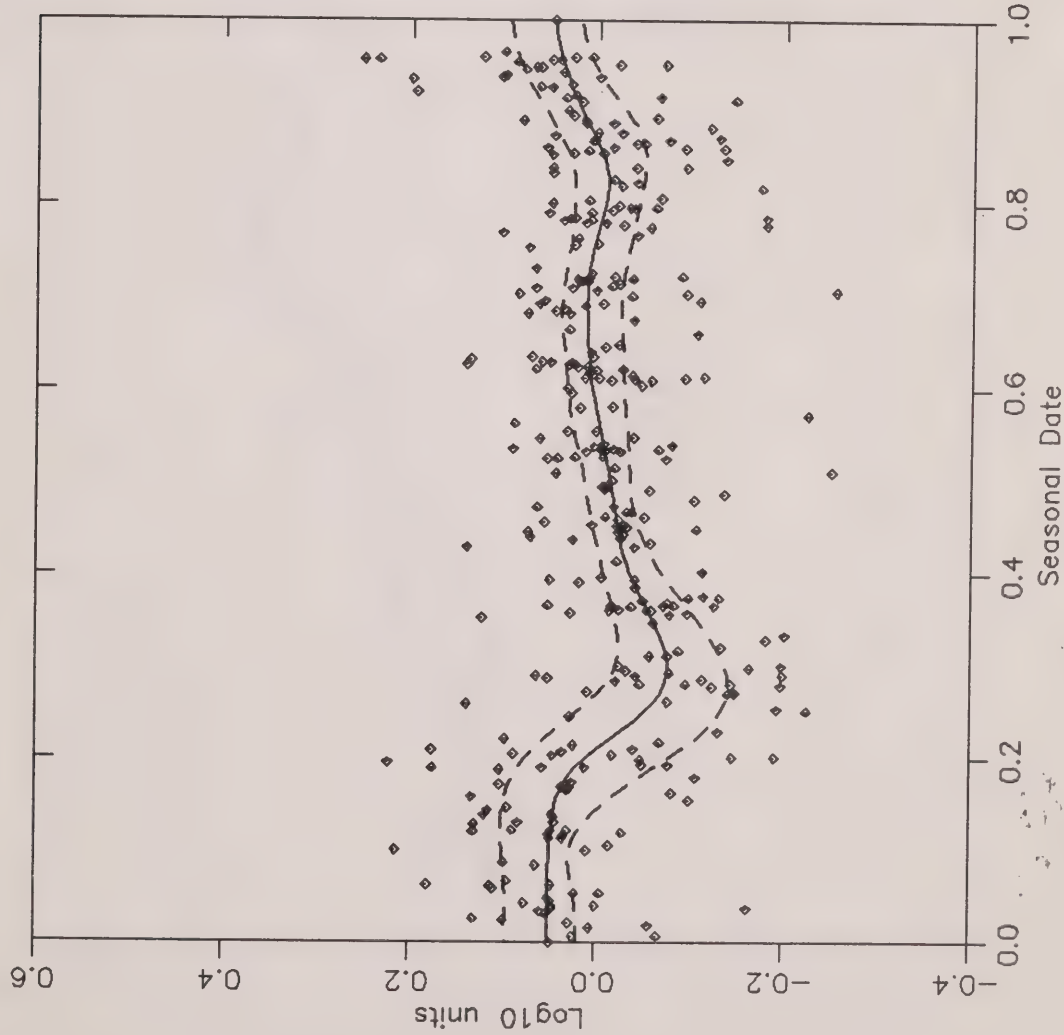
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.968
p(RHO) = 0.000 dof = 27
% Variation due to trend = 80.4

Data file: CLID003.FTM
Parameter: CLIDUR
Site: 06007600302

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Chlorides mg/l

Credit R. at Hwy. 7, Narval



Run #2: 9 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Seasonal median
-- 1st & 3rd quartiles

Seasonal Max @ JAN 8
Seasonal Min @ APR 20
Seasonal Amplitude = 0.126

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 336
Series begins @ JUN 30 1965
Series ends @ AUG 12 1993

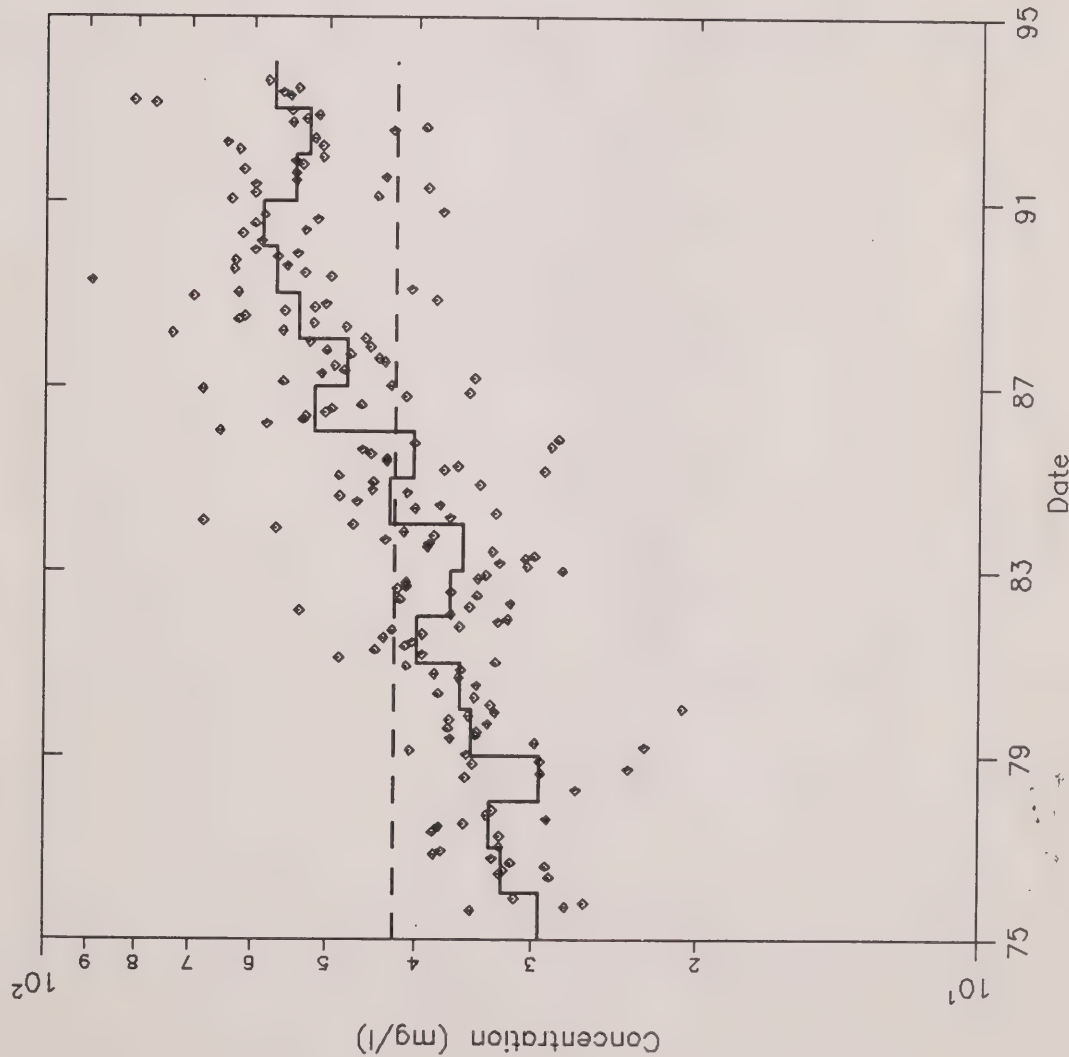
% Variation due to seasonal = 22.6

Data file: CLID003.FTM
Parameter: CLIDUR
Site: 06007600302

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Chlorides mg/l

Credit R. at Derry Rd., West of Hwy. 10



Run #2: 5 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 42.153

Maximum trend @ 1990 = 58.561
Minimum trend @ 1975 = 29.431
Trend range = 29.130

Observations = 186
Series begins @ AUG 20 1975
Series ends @ AUG 12 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

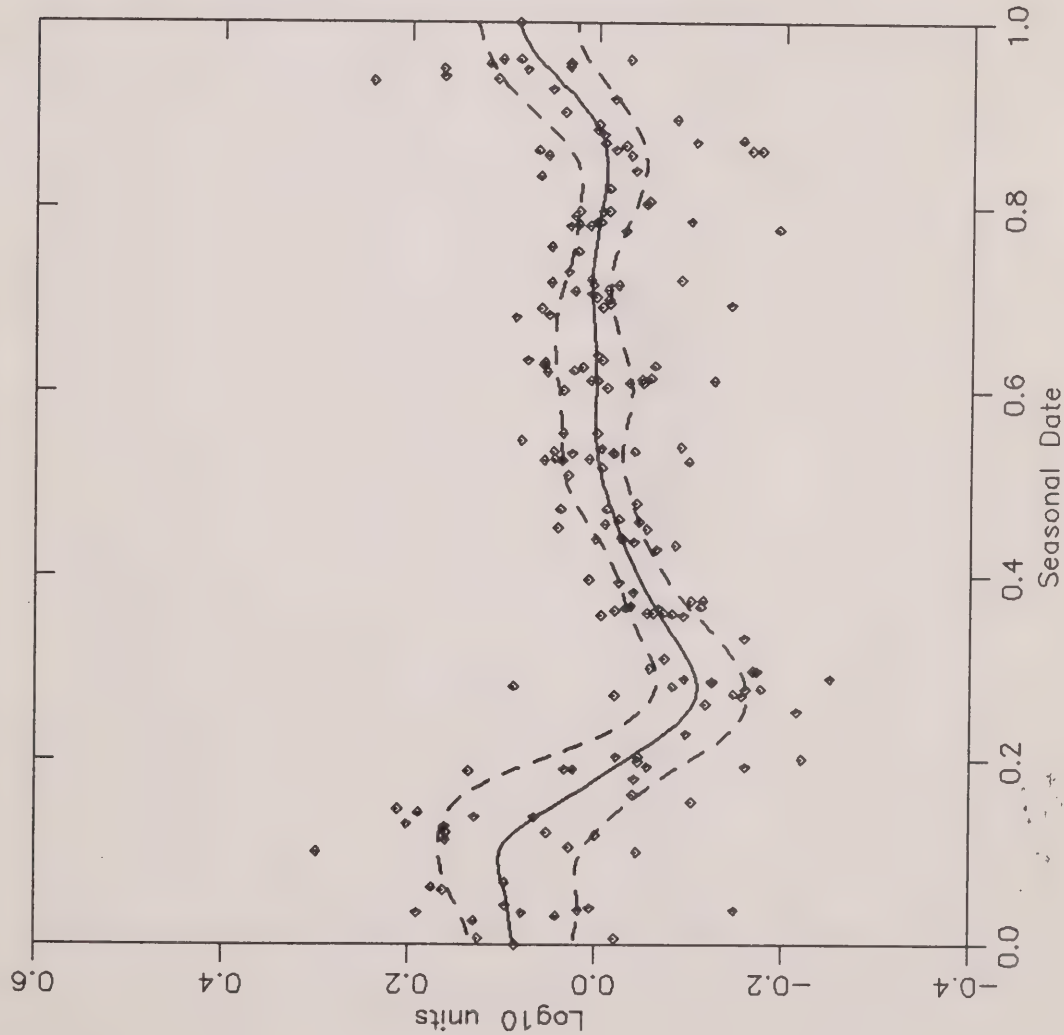
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.949
p(RHO) = 0.000 dof = 17
% Variation due to trend = 63.1

Data file: CLID017.FTM
Parameter: CLIDUR
Site: 06007601702

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Chlorides mg/l

Credit R. at Derry Rd., West of Hwy. 10



Run #2: 5 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ FEB 2
Seasonal Min @ APR 13
Seasonal Amplitude = 0.212

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 186
Series begins @ AUG 20 1975
Series ends @ AUG 12 1993

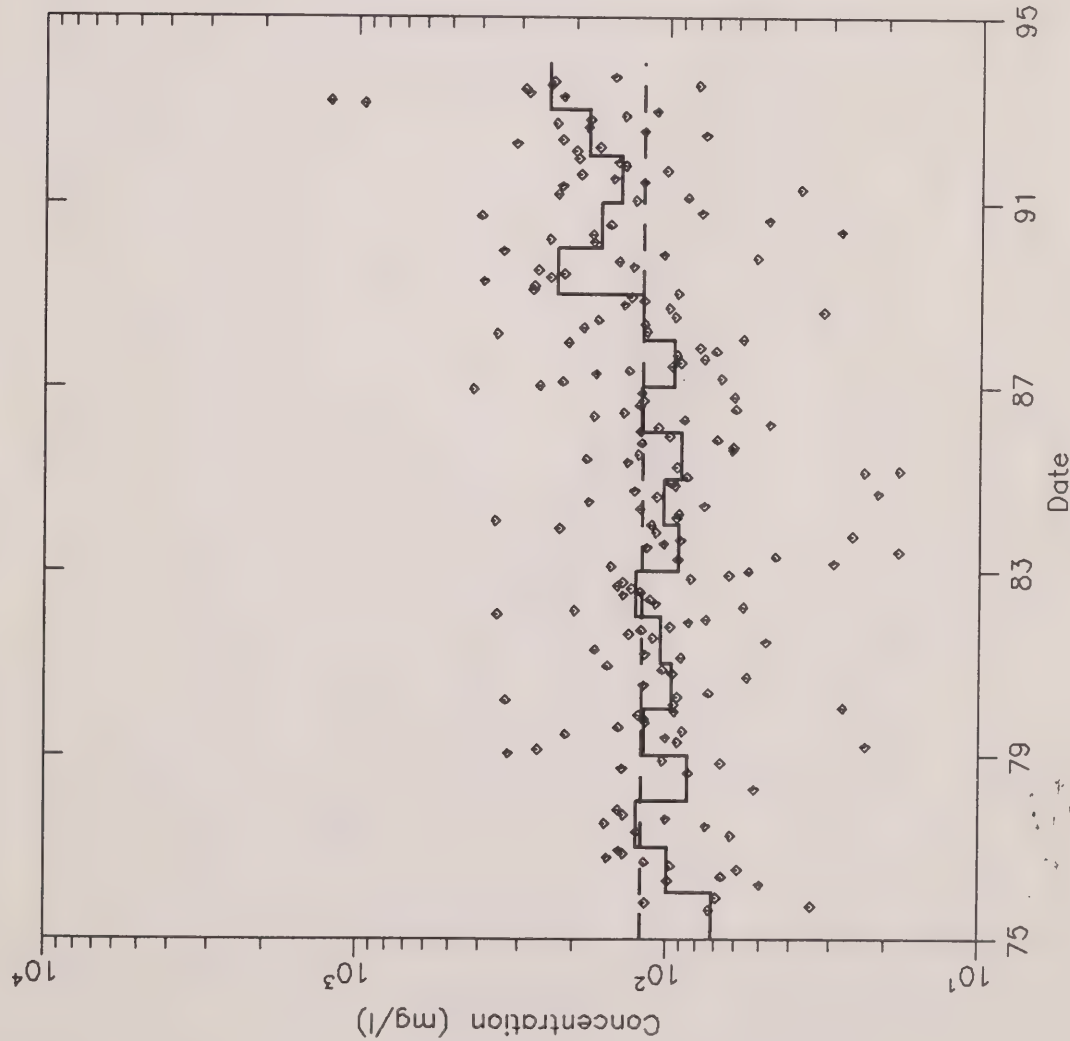
% Variation due to seasonal = 42.0

Data file: CLID017.FTM
Parameter: CLUDUR
Site: 06007601702

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Chlorides mg/l

Fletcher's Ck. at Steeles Ave., Brampton



Run #2: 1 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 119.785

Maximum trend @ 1993 = 241.330
Minimum trend @ 1975 = 70.957
Trend range = 170.373

Observations = 193
Series begins @ AUG 20 1975
Series ends @ SEP 16 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

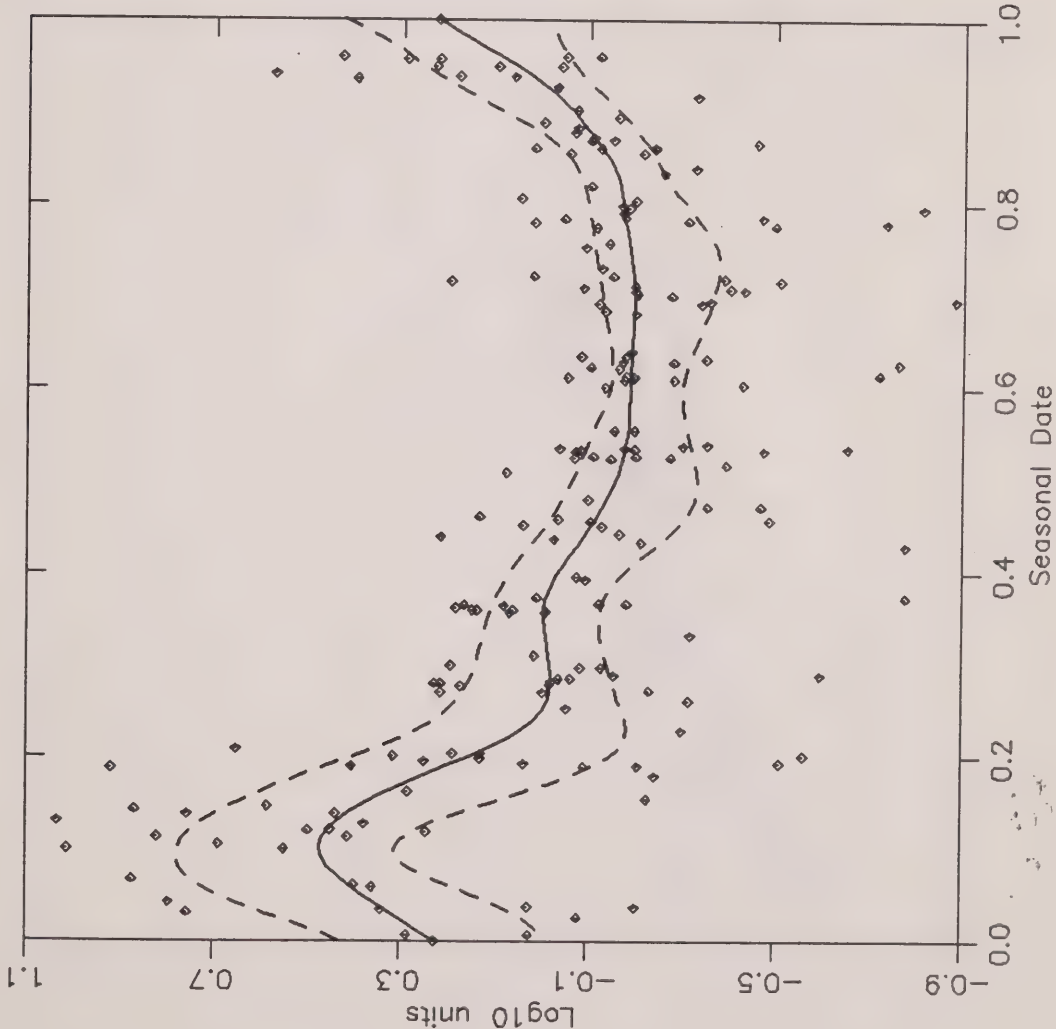
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.672
p(RHO) = 0.002 dof = 17
% Variation due to trend = 20.0

Data file: CLID016.FTM
Parameter: CLIDUR
Site: 06007601602

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Chlorides mg/l

Fletcher's Ck. at Steeles Ave., Brampton



Run #2: 1 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ FEB 6
Seasonal Min @ SEP 9
Seasonal Amplitude = 0.669

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 193
Series begins @ AUG 20 1975
Series ends @ SEP 16 1993

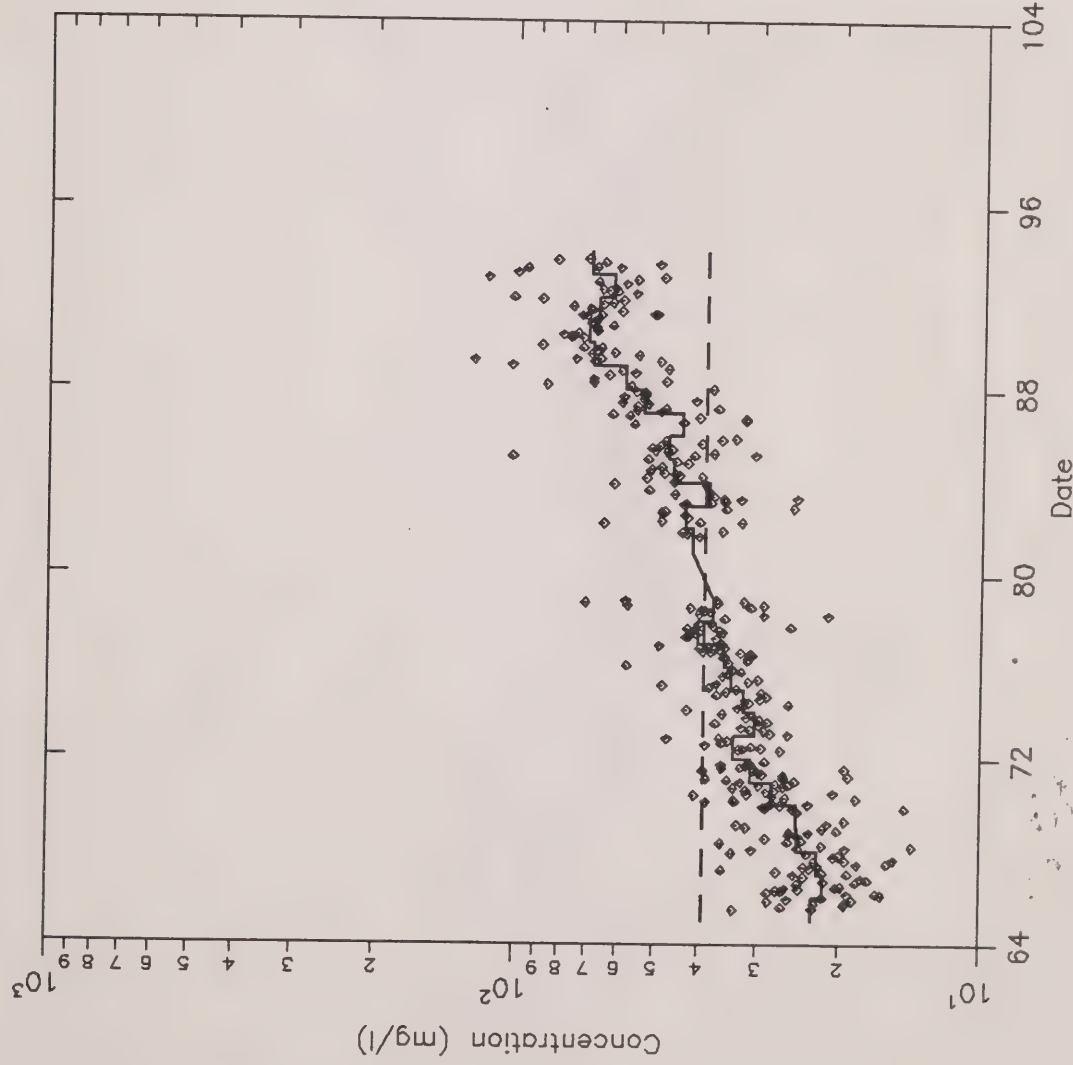
% Variation due to seasonal = 47.3

Data file: CLID016.FTM
Parameter: CLIDUR
Site: 06007601602

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Chlorides mg/l

Credit R. at Hwy. 5, Erindale



Run #2: 21 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Annual median
- - - Geometric mean annual median
= 39.025

Maximum trend @ 1990 = 69.853
Minimum trend @ 1966 = 21.525
Trend range = 48.329

Observations = 341
Series begins @ JUN 30 1965
Series ends @ SEP 14 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

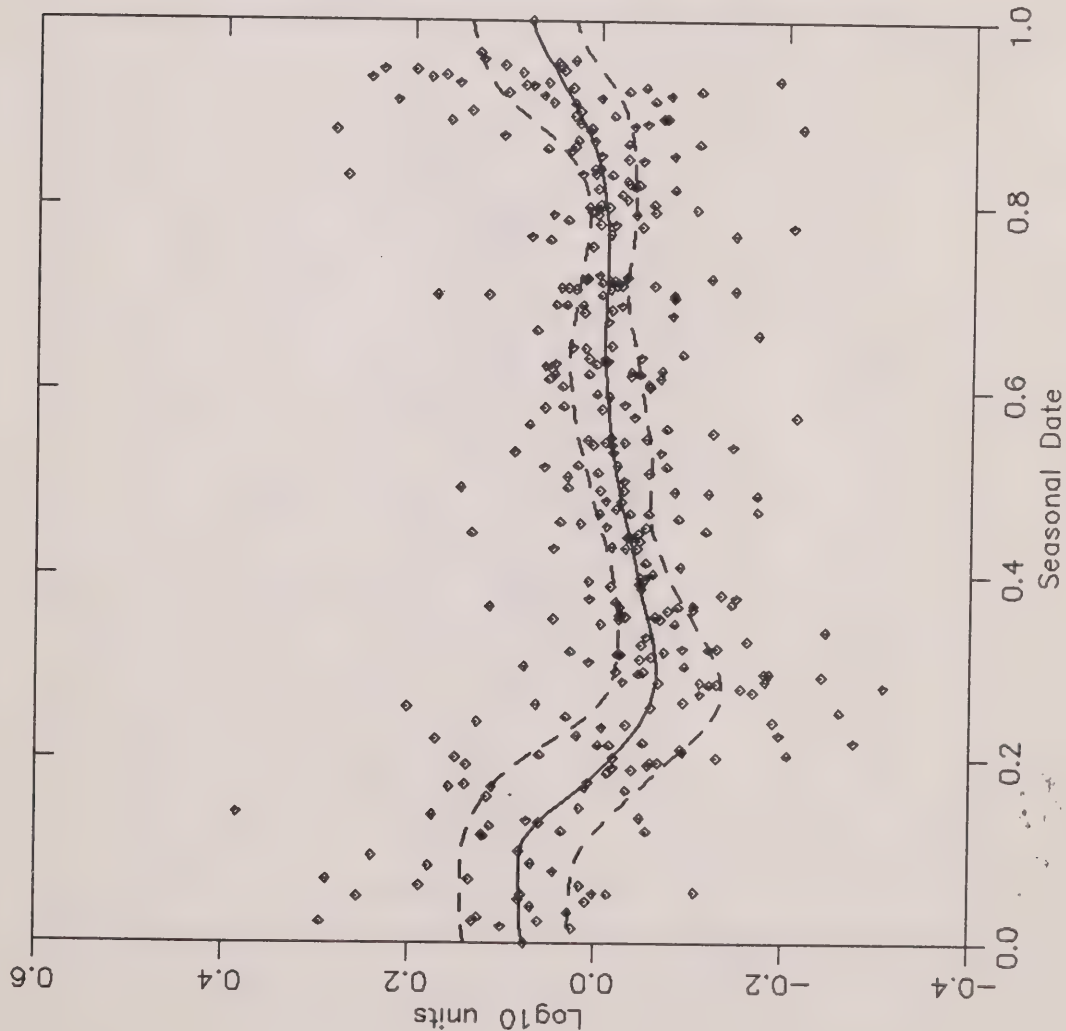
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.981
p(RHO) = 0.000 dof = 25
% Variation due to trend = 78.3

Data file: CLID002.FTM
Parameter: CLIDUR
Site: 06007600202

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Chlorides mg/l

Credit R. at Hwy. 5, Erindale



Run #2: 21 FAR OUTLIERS DELETED
Run date: December 10, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JAN 30
Seasonal Min @ APR 20
Seasonal Amplitude = 0.146

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 341
Series begins @ JUN 30 1965
Series ends @ SEP 14 1993

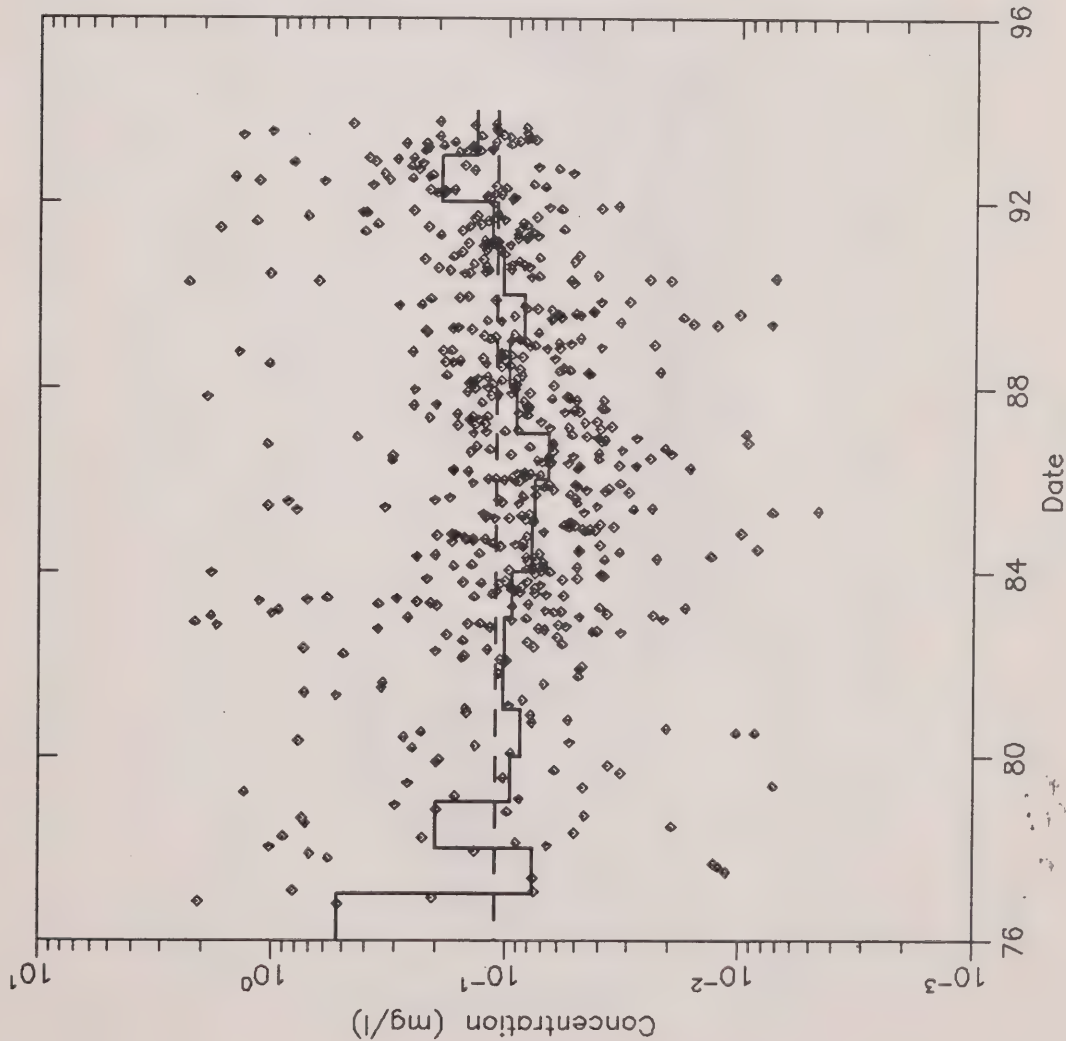
% Variation due to seasonal = 25.9

Data file: CLID002.FTM
Parameter: CLIDUR
Site: 06007600202

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at Southern Dam of Orangeville Reservoir



Run #2: 3 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
- - Geometric mean annual median
= 0.110

Maximum trend @ 1976 = 0.524
Minimum trend @ 1986 = 0.066
Trend range = 0.458

Observations = 585
Series begins @ OCT 20 1976
Series ends @ OCT 4 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

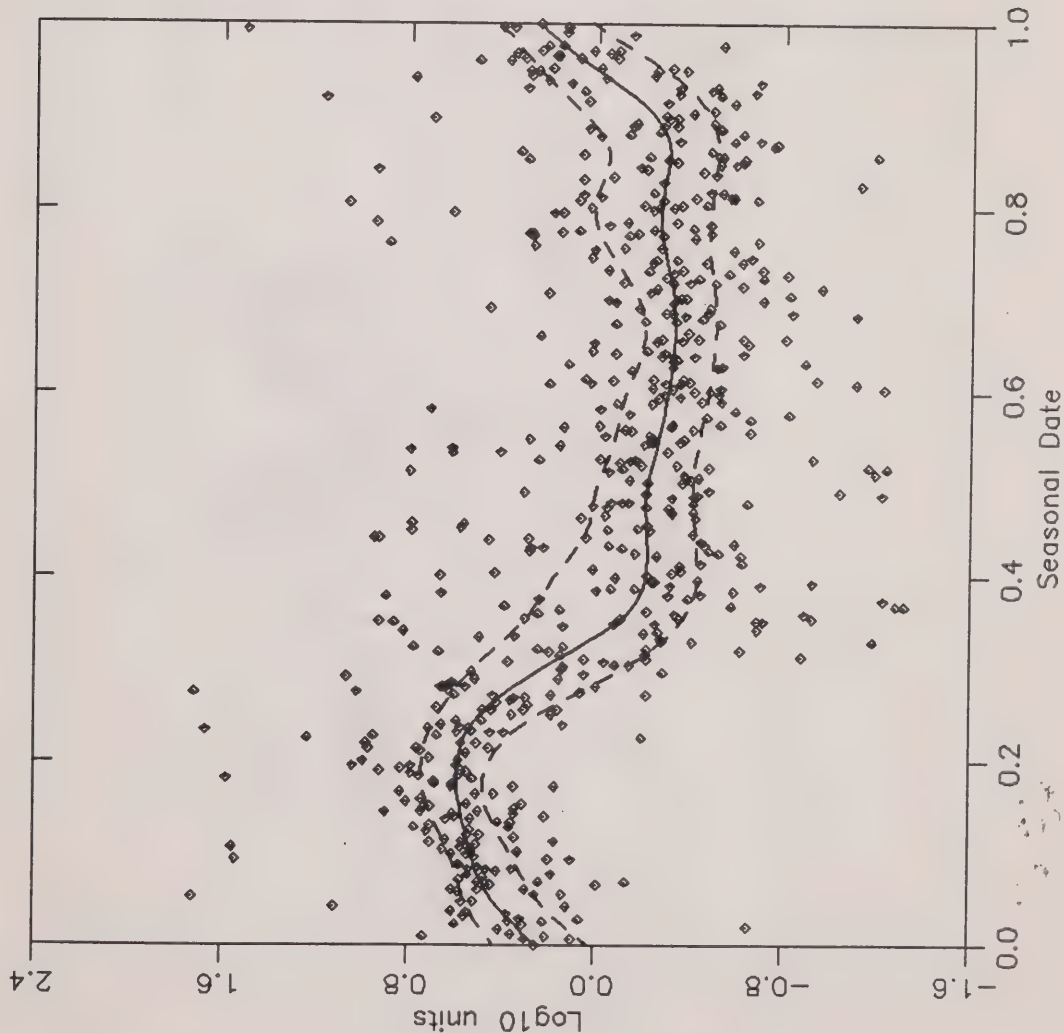
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.086
p(RHO) = 0.735 dof = 16
% Variation due to trend = 11.2

Data file: NNOT019.FTM
Parameter: NNOTFR
Site: 06007601902

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at Southern Dam of Orangeville Reservoir



Run #2: 3 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ MAR 11
Seasonal Min @ SEP 2
Seasonal Amplitude = 0.922

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 585
Series begins @ OCT 20 1976
Series ends @ OCT 4 1993

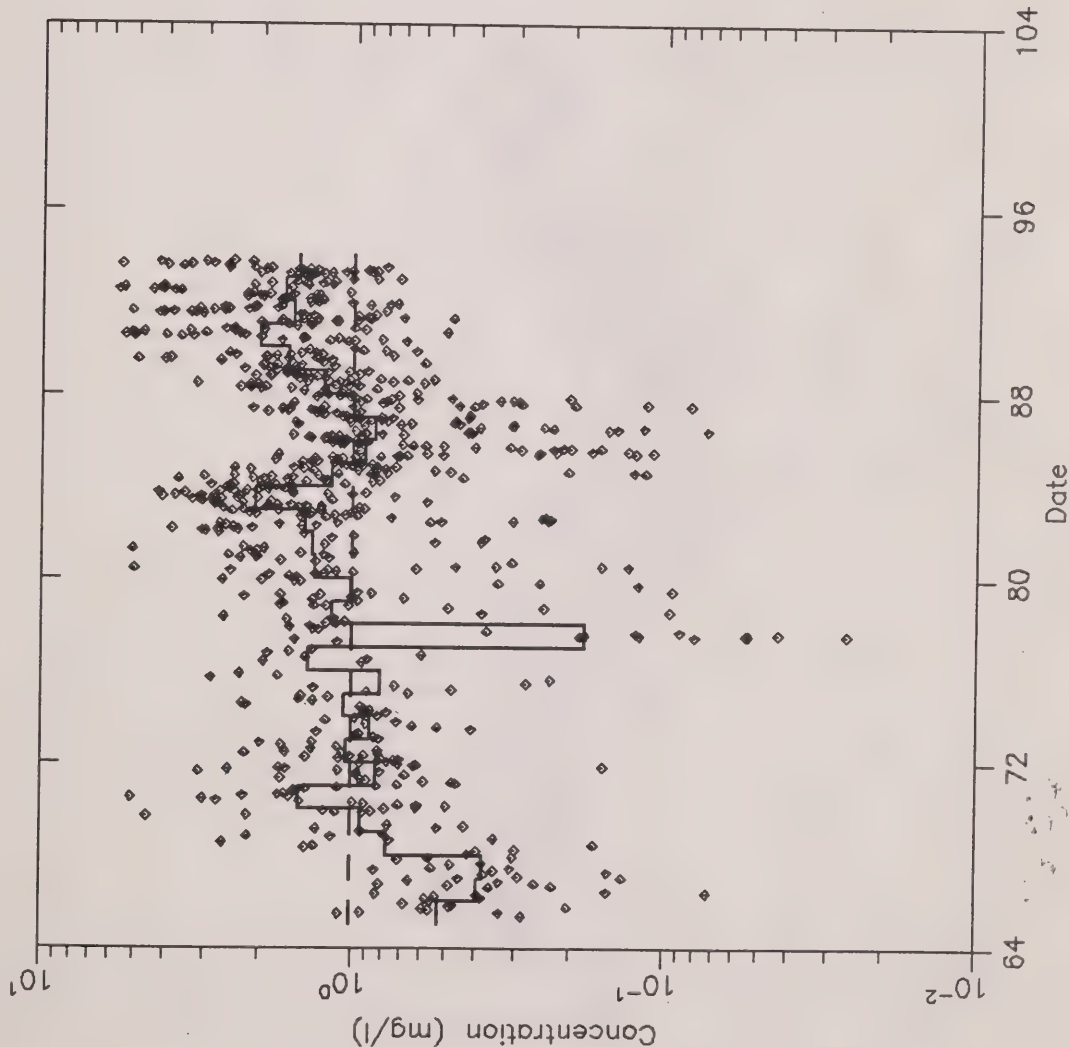
% Variation due to seasonal = 43.7

Data file: NN0T019.FTM
Parameter: NN0TFR
Site: 06007601902

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at Hwy. 10, d/s Orangeville STP



Run #2: 21 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median

- - - Geometric mean annual median
= 1.011

Maximum trend @ 1983 = 2.070

Minimum trend @ 1977 = 0.181

Trend range = 1.889

Observations = 772

Series begins @ MAY 17 1965

Series ends @ OCT 4 1993

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIAN:

Spearman RHO = 0.678

p(RHO) = 0.000 dof = 27

% Variation due to trend = 31.7

Data file: NNOT006.FTM

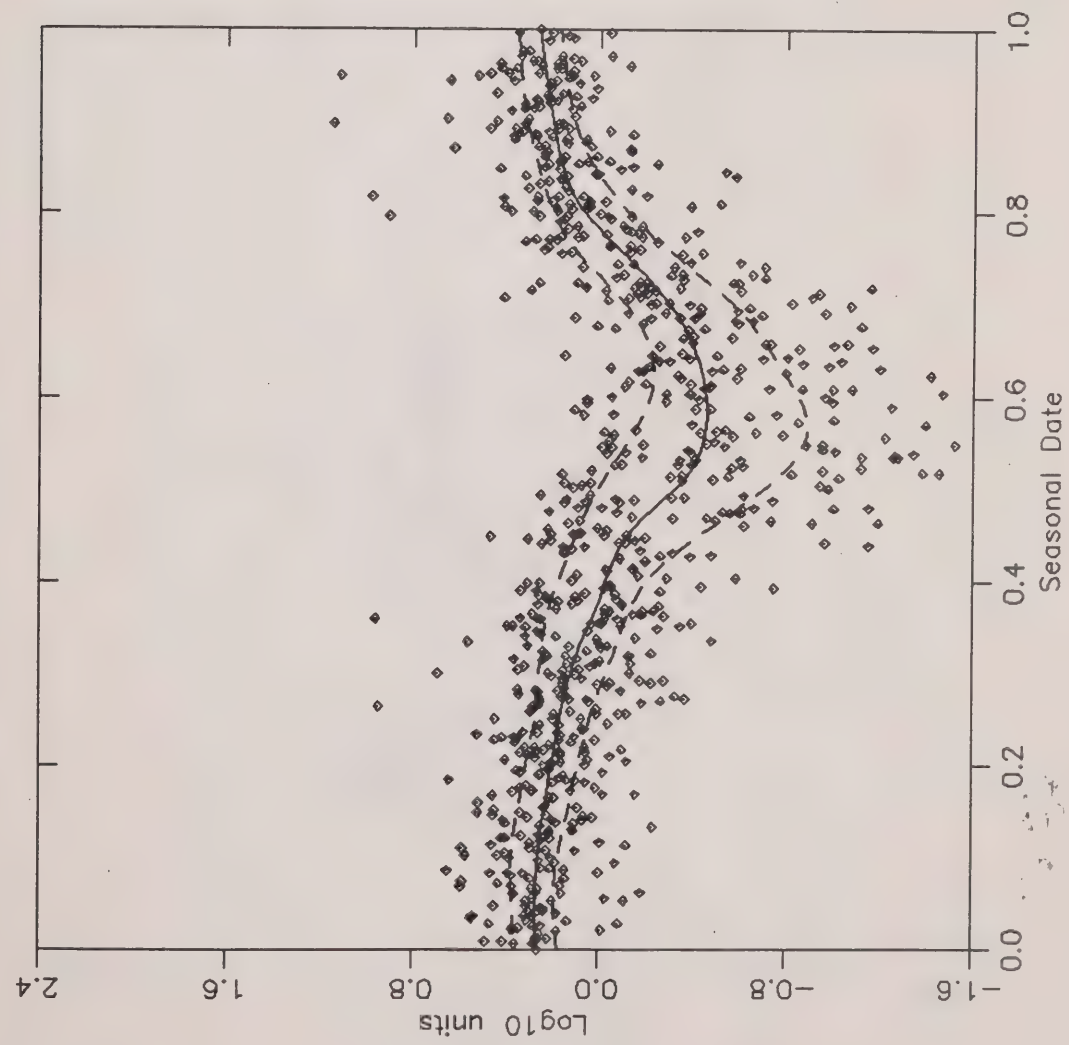
Parameter: NNOTFR

Site: 06007600602

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at Hwy. 10, d/s Orangeville STP



Run #2: 21 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JAN 15
Seasonal Min @ AUG 4
Seasonal Amplitude = 0.732

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 772
Series begins @ MAY 17 1965
Series ends @ OCT 4 1993

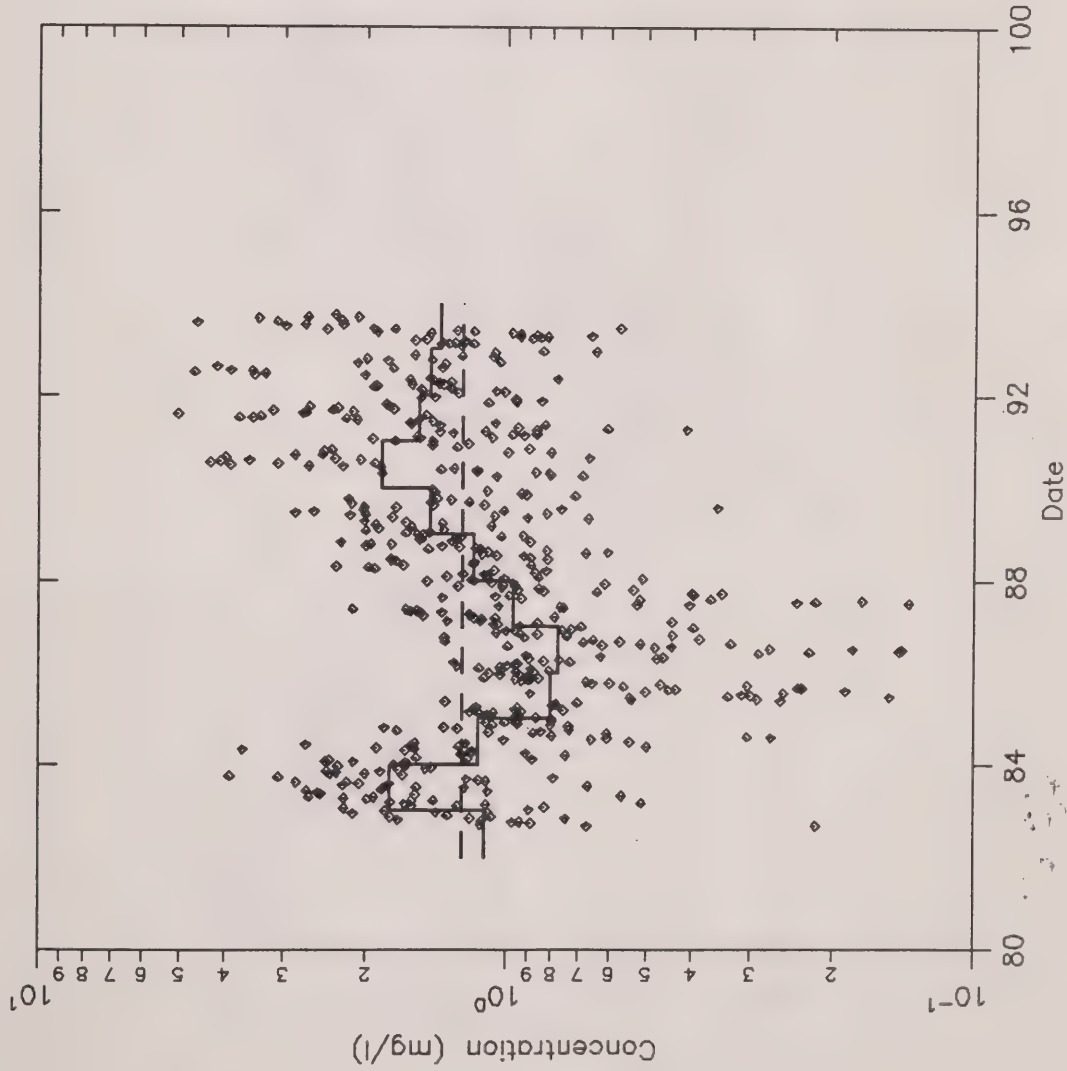
% Variation due to seasonal = 49.9

Data file: NNO7006.FTM
Parameter: NNOTFR
Site: 06007600602

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at Hwy. 10, 2nd Bridge below Orangeville



Run #2: 3 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 1.238

Maximum trend @ 1990 = 1.853
Minimum trend @ 1986 = 0.770
Trend range = 1.082

Observations = 511
Series begins @ SEP 8 1982
Series ends @ OCT 4 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

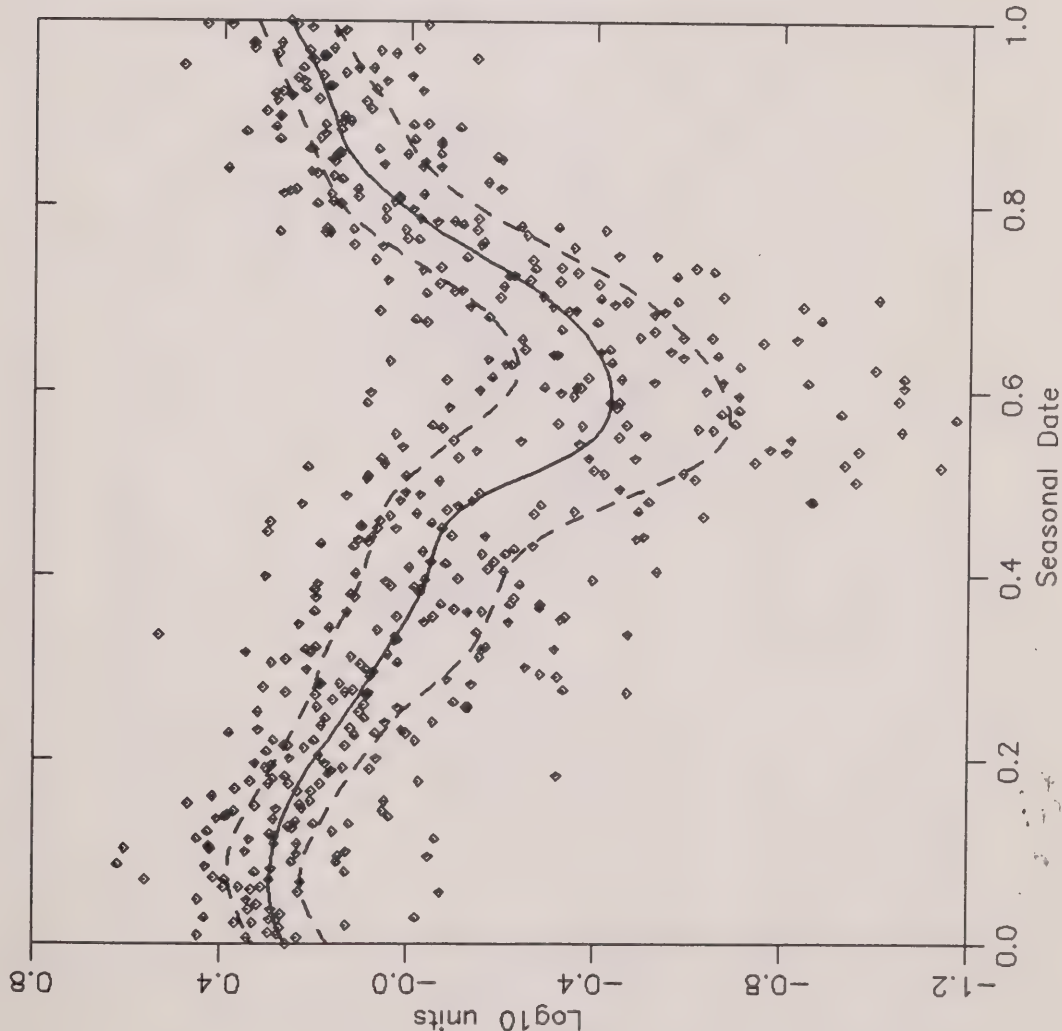
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.424
p(RHO) = 0.170 dof = 10
% Variation due to trend = 30.8

Data file: NNOT024.FTM
Parameter: NNOTFR
Site: 06007602402

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at Hwy. 10, 2nd Bridge below Orangeville



Run #2: 3 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
-- 1st & 3rd quartiles

Seasonal Max @ JAN 26
Seasonal Min @ AUG 8
Seasonal Amplitude = 0.727

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 511
Series begins @ SEP 8 1982
Series ends @ OCT 4 1993

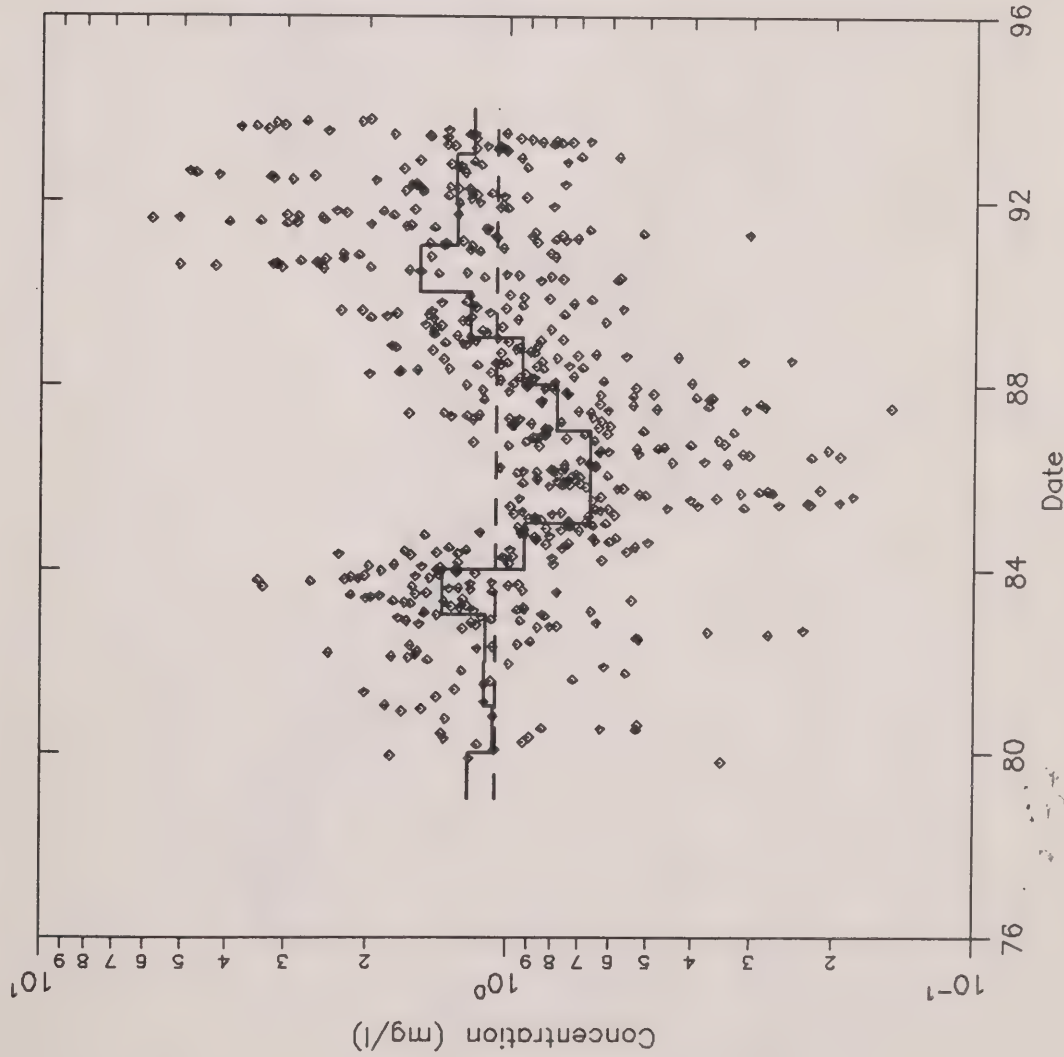
% Variation due to seasonal = 56.8

Data file: NNOT024.FTM
Parameter: NNOTFR
Site: 06007602402

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at Melville



Run #2: 4 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 1.059

Maximum trend @ 1990 = 1.548
Minimum trend @ 1986 = 0.661
Trend range = 0.887

Observations = 555
Series begins @ OCT 23 1979
Series ends @ OCT 4 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

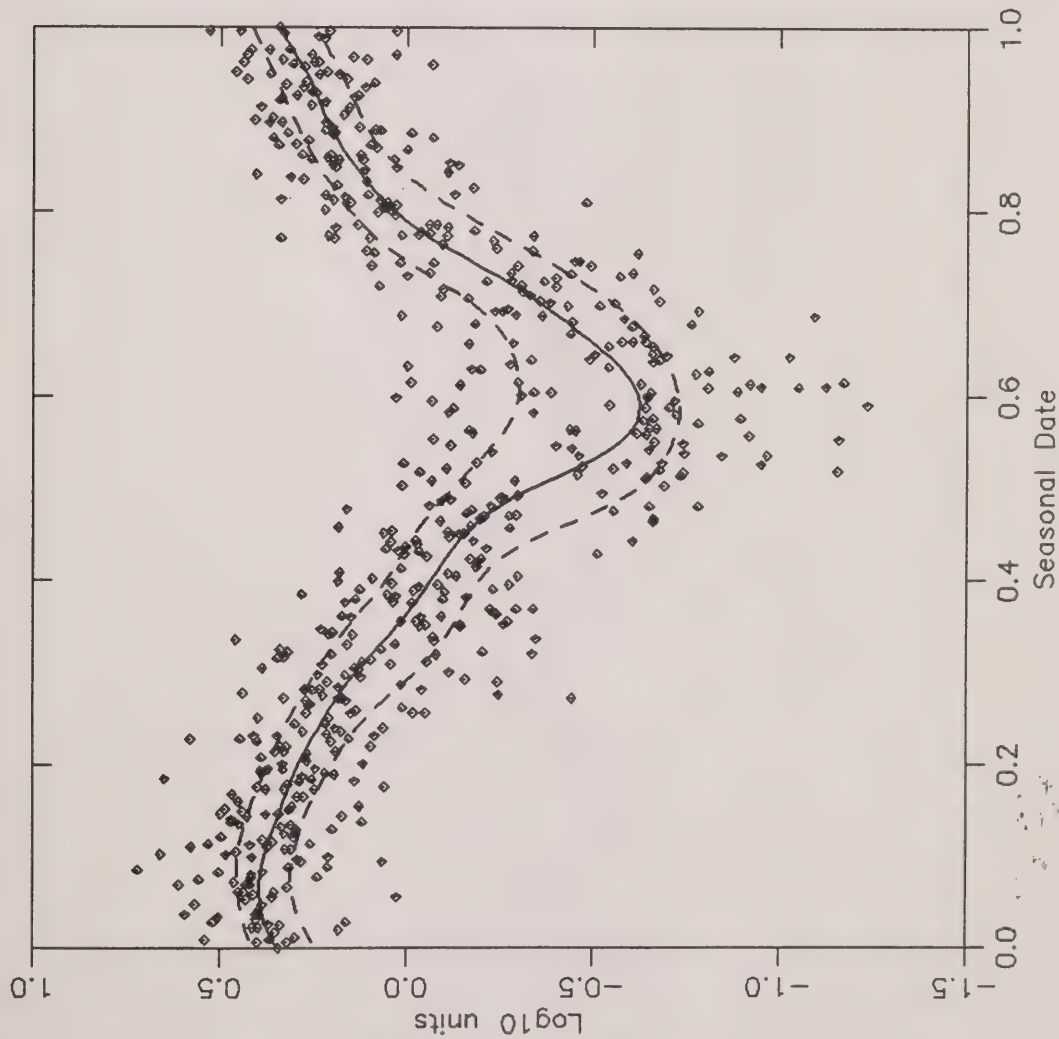
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.254
p(RHO) = 0.362 dof = 13
% Variation due to trend = 33.7

Data file: NNOT023.FTM
Parameter: NNOTFR
Site: 06007602302

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at Melville



Run #2: 4 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JAN 26
Seasonal Min @ AUG 4
Seasonal Amplitude = 1.020

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 555
Series begins @ OCT 23 1979
Series ends @ OCT 4 1993

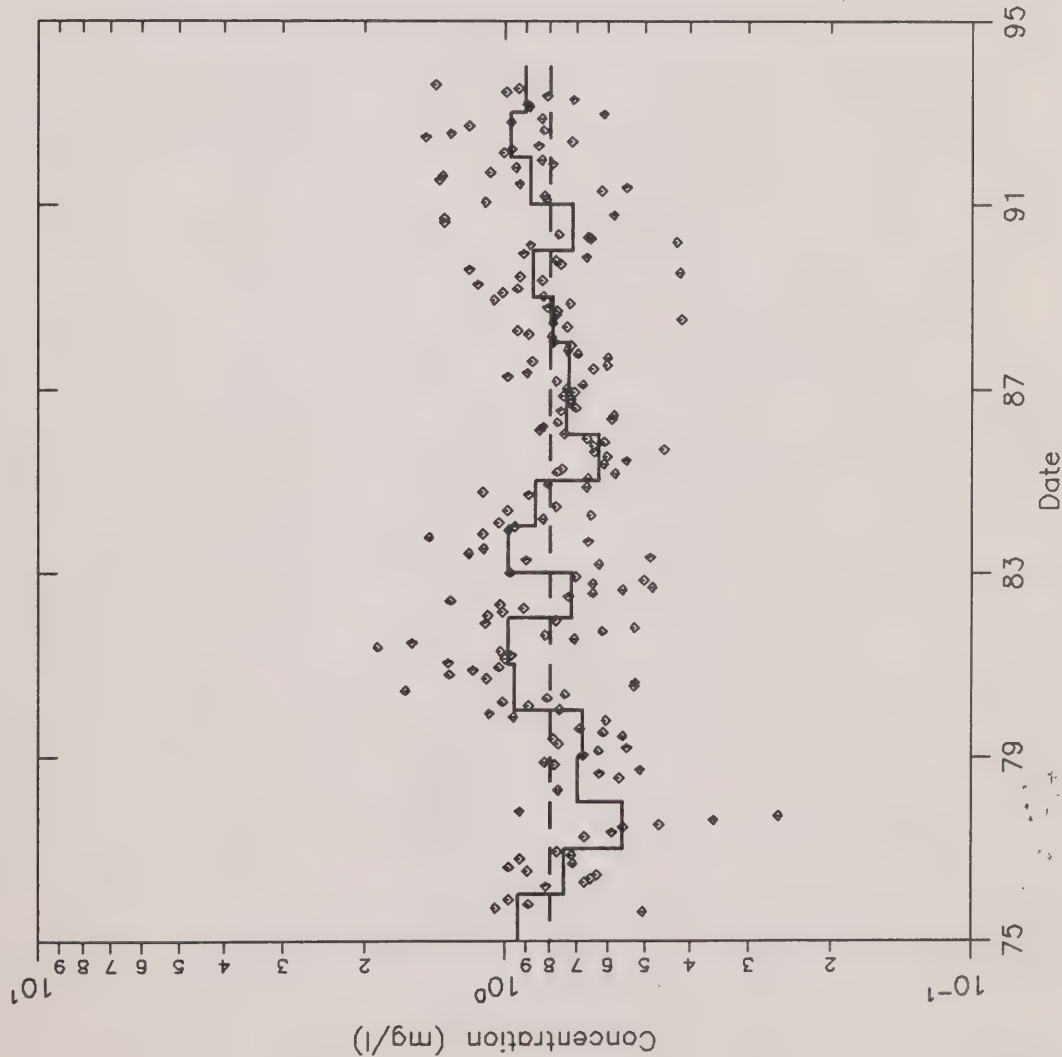
% Variation due to seasonal = 71.8

Data file: NN0T023.FTM
Parameter: NN0TFR
Site: 06007602302

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at 20th Sideroad, Caledon Twp.



Run #2: 4 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 0.796

Maximum trend @ 1981 = 0.983
Minimum trend @ 1977 = 0.557
Trend range = 0.426

Observations = 192
Series begins @ AUG 20 1975
Series ends @ AUG 12 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

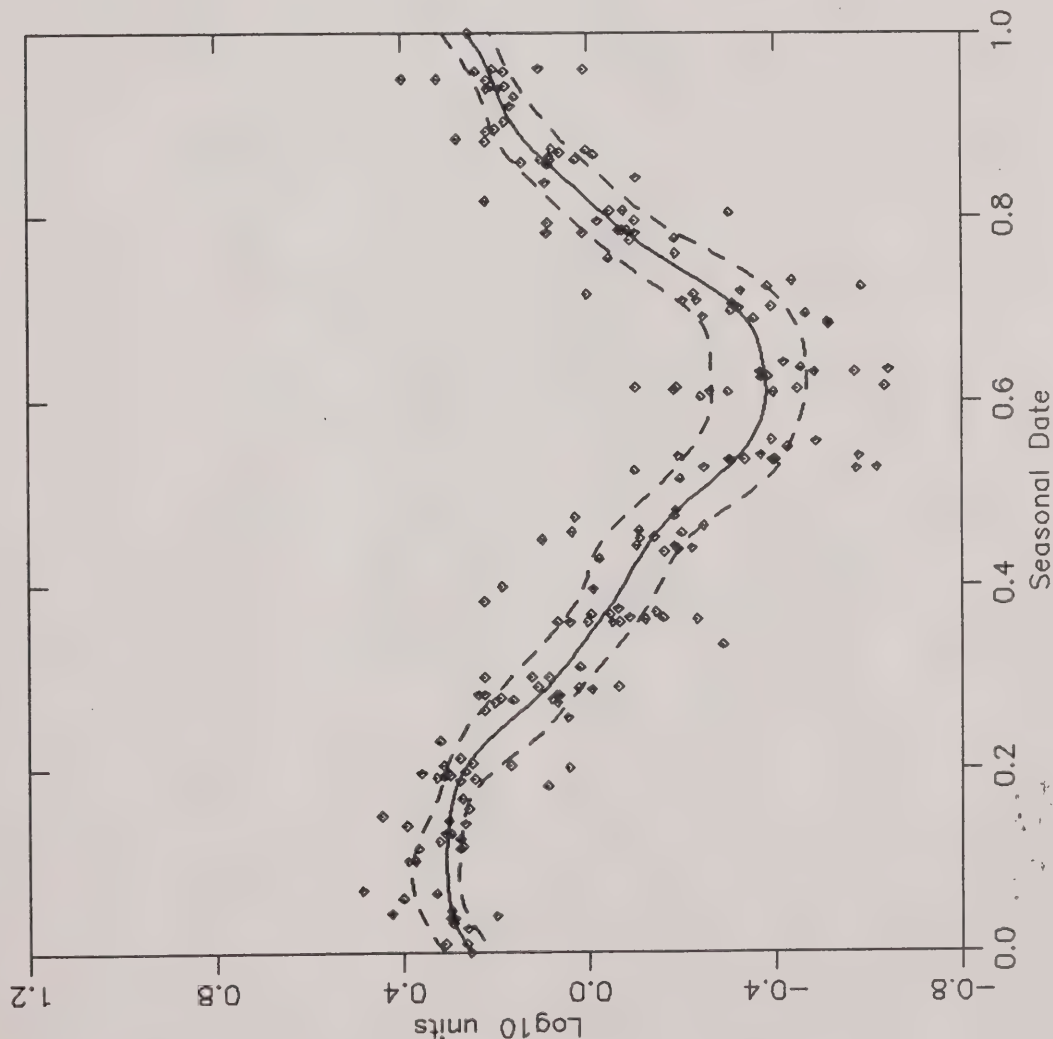
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.207
 $p(RHO) = 0.395$ dof = 17
% Variation due to trend = 23.3

Data file: NNOT018.FTM
Parameter: NNOTFR
Site: 06007601802

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at 20th Sideroad, Caledon Twp.



Run #2: 4 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ FEB 6
Seasonal Min @ AUG 11
Seasonal Amplitude = 0.689

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 192
Series begins @ AUG 20 1975
Series ends @ AUG 12 1993

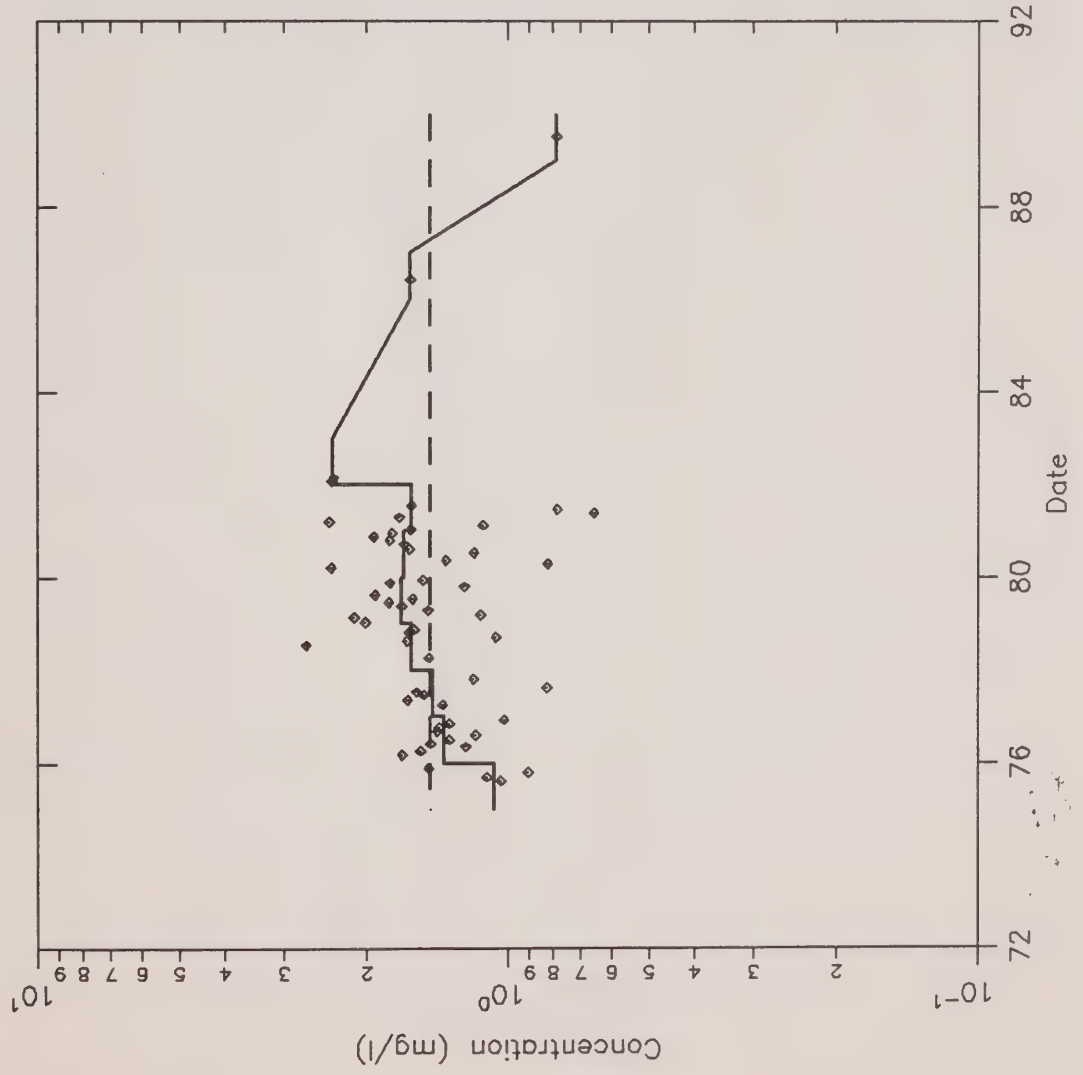
% Variation due to seasonal = 82.7

Data file: NNOT018.FTM
Parameter: NNOTFR
Site: 06007601802

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. Erin Br. at Wellington/Peel Cty. Boundary



Run #2: 2 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 1.467

Maximum trend @ 1982 = 2.367
Minimum trend @ 1989 = 0.786
Trend range = 1.581

Observations = 57
Series begins @ AUG 20 1975
Series ends @ JUL 12 1989
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.905
 $p(RHO) = 0.002$ dof = 6

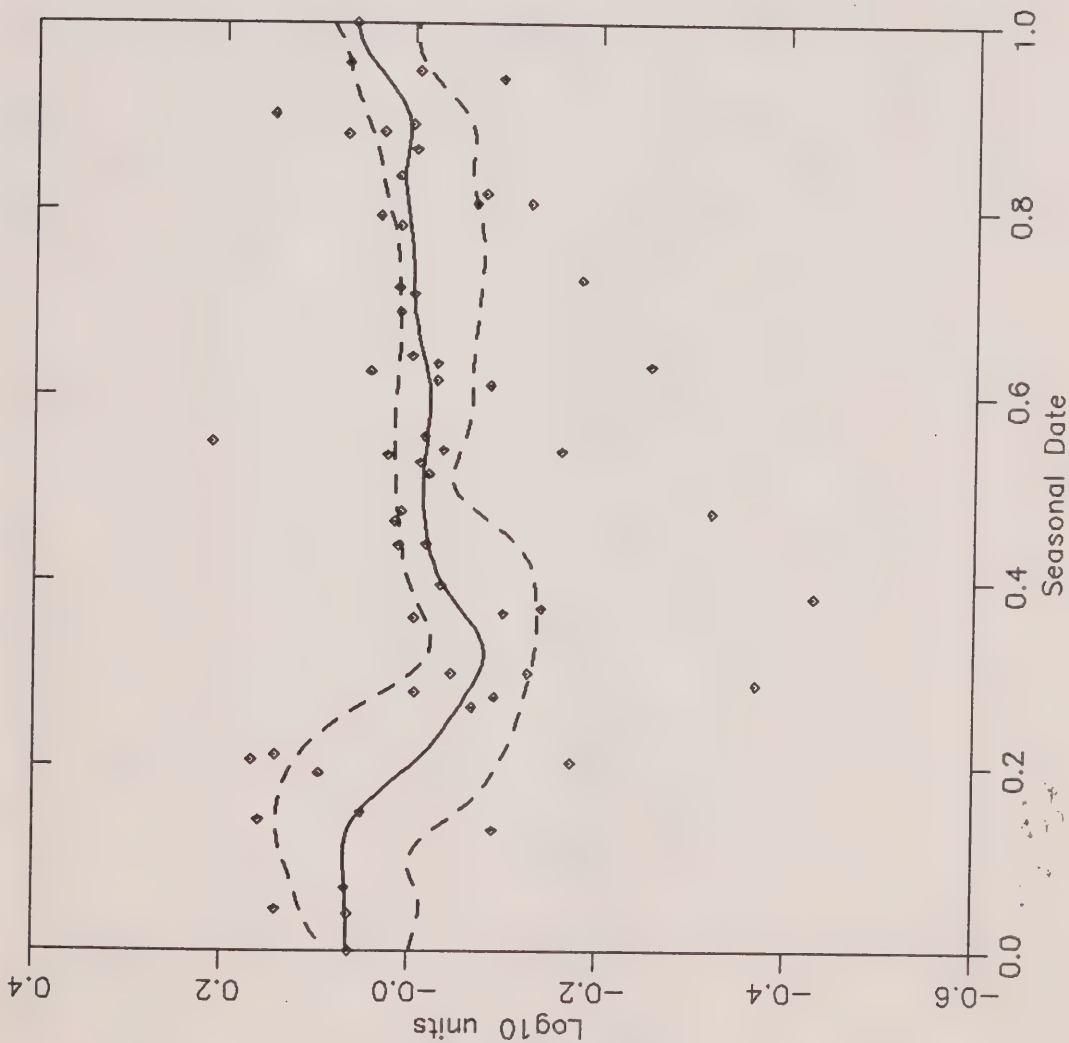
% Variation due to trend = 23.2

Data file: NNOT015.FTM
Parameter: NNOTFR
Site: 06007601502

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. Erin Br. at Wellington/Peel Cty. Boundary



Run #2: 2 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ FEB 6
Seasonal Min @ APR 27
Seasonal Amplitude = 0.148
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 57
Series begins @ AUG 20 1975
Series ends @ JUL 12 1989

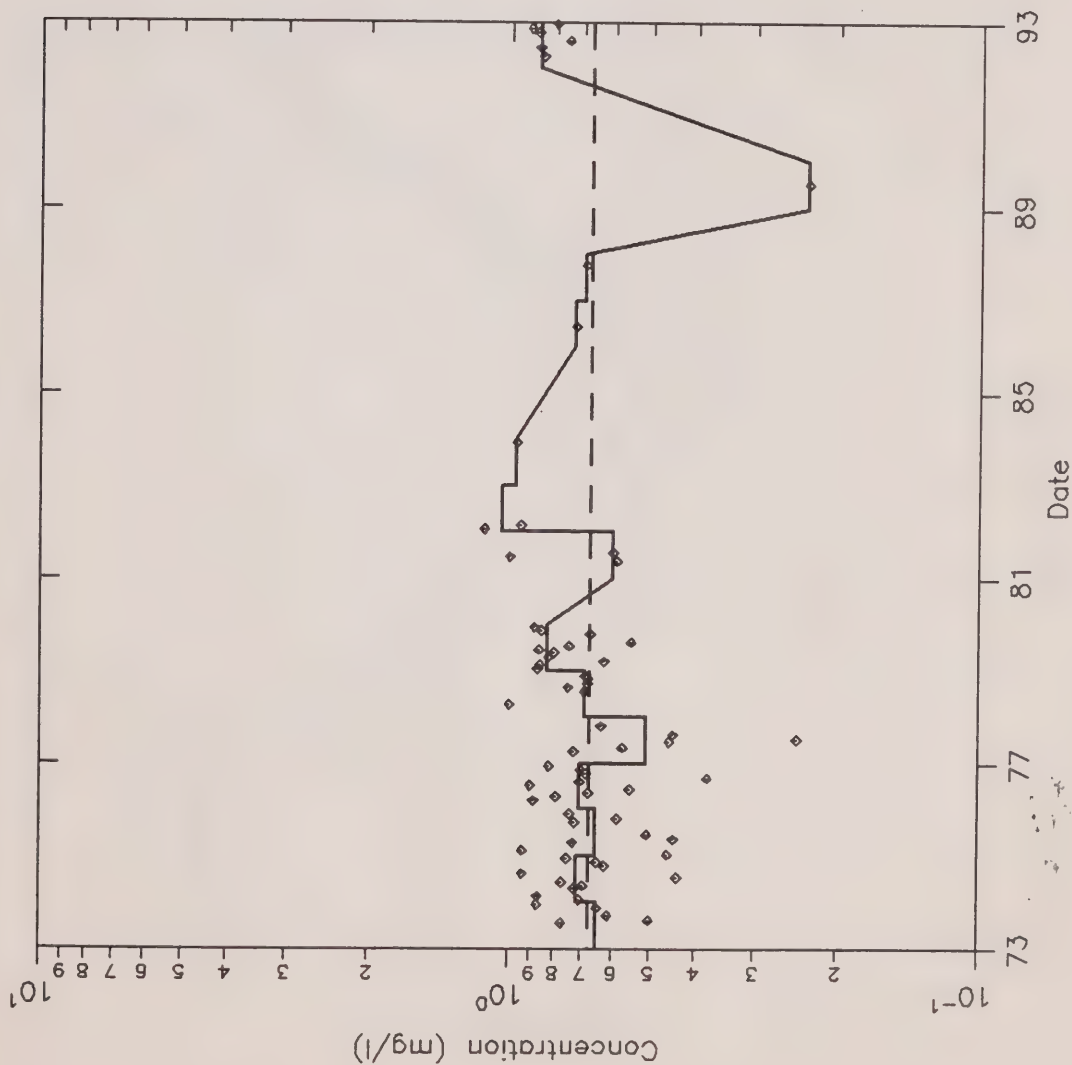
% Variation due to seasonal = 17.3

Data file: NN0T015.FTM
Parameter: NN0TFR
Site: 06007601502

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at Cty. Rd. 9, Terra Cotta



Run #2: 8 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 0.670

Maximum trend @ 1982 = 1.036
Minimum trend @ 1989 = 0.233
Trend range = 0.803

Observations = 71
Series begins @ JUL 25 1973
Series ends @ DEC 17 1992
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

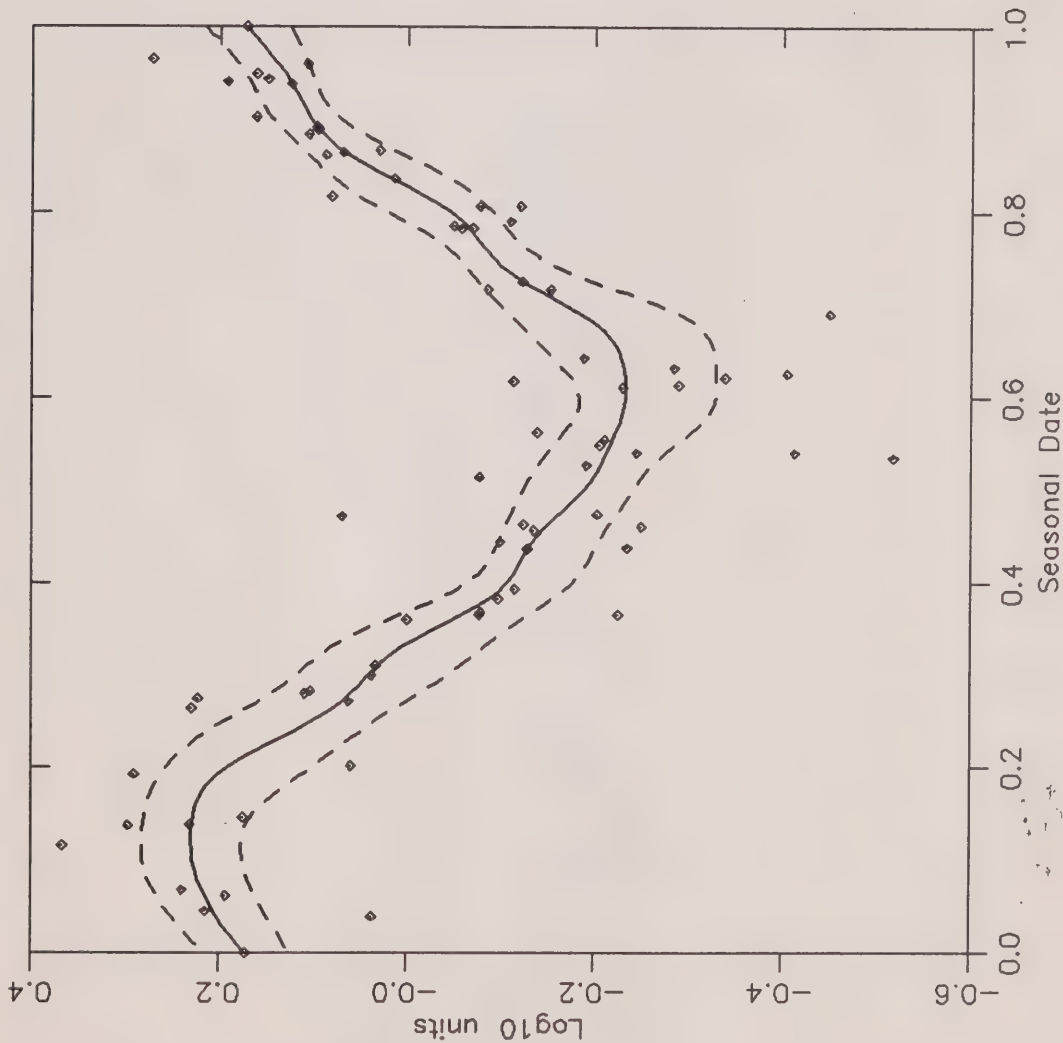
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.455
p(RHO) = 0.187 dof = 8
% Variation due to trend = 46.0

Data file: NNOT010.FTM
Parameter: NNOTFR
Site: 06007601002

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at Cty. Rd. 9, Terra Cotta



Run #2: 8 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
-- 1st & 3rd quartiles

Seasonal Max @ FEB 13
Seasonal Min @ AUG 11
Seasonal Amplitude = 0.463

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 71

Series begins @ JUL 25 1973
Series ends @ DEC 17 1992

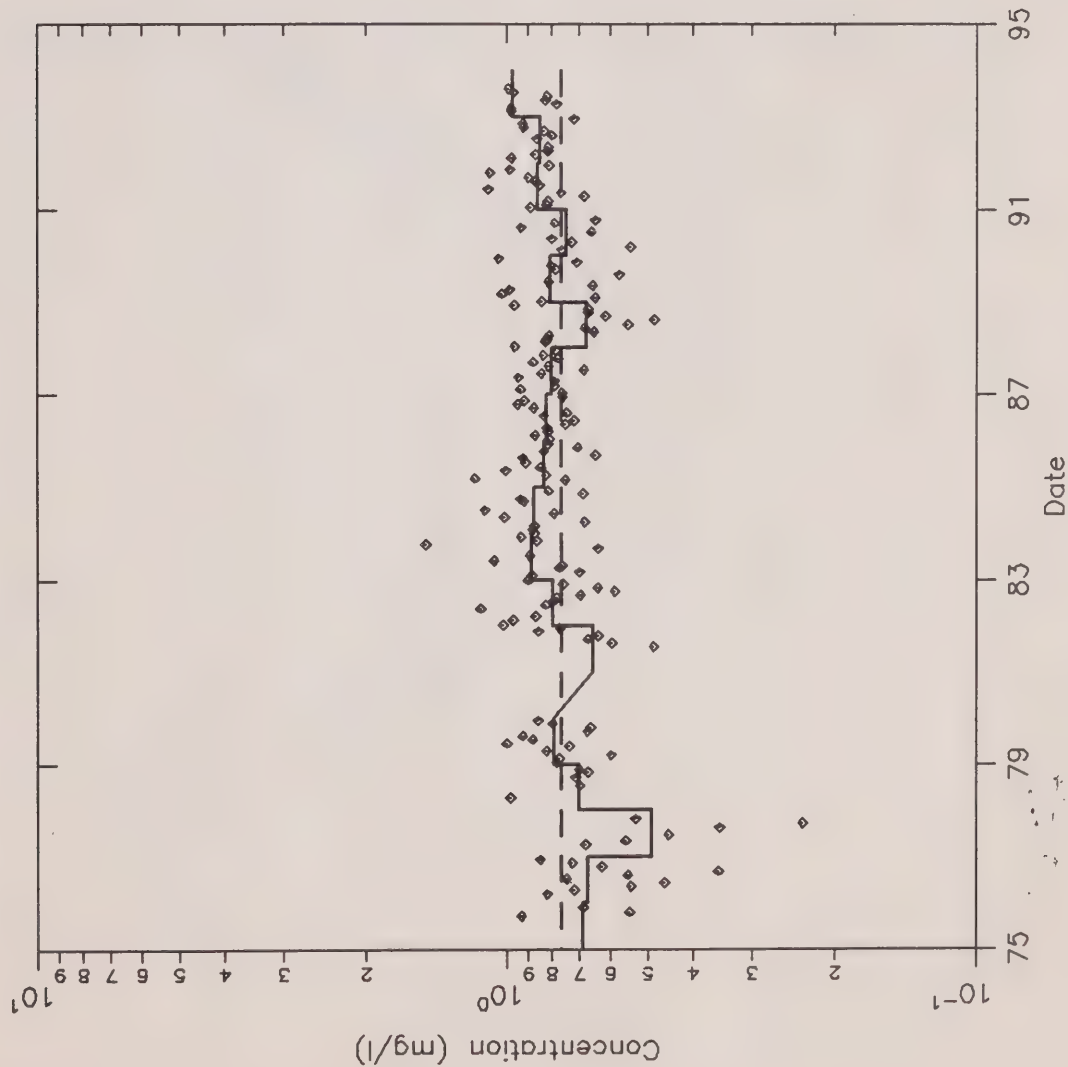
% Variation due to seasonal = 78.5

Data file: NNOT010.FTM
Parameter: NNOTFR
Site: 06007601002

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at 22nd Sideroad, Glen Williams



Run #2: 9 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
- - Geometric mean annual median
= 0.764

Maximum trend @ 1993 = 0.968
Minimum trend @ 1977 = 0.490
Trend range = 0.478

Observations = 170
Series begins @ SEP 19 1975
Series ends @ AUG 12 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

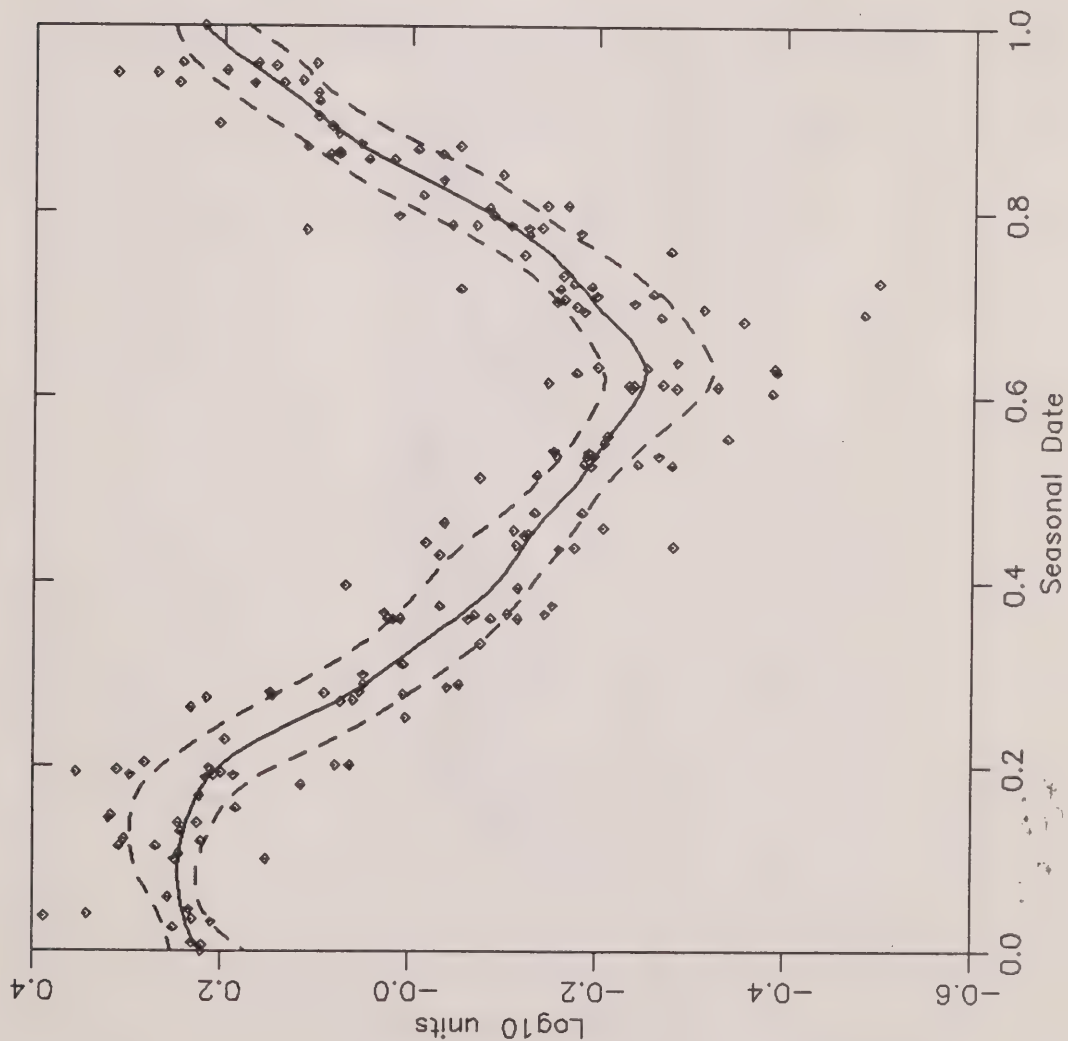
TREND TEST ON ANNUAL MEDIAN:
Spearman RHO = 0.626
p(RHO) = 0.005 dof = 16
% Variation due to trend = 39.3

Data file: NNOT013.FTM
Parameter: NNOTFR
Site: 06007601302

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at 22nd Sideroad, Glen Williams



Run #2: 9 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ FEB 2
Seasonal Min @ AUG 18
Seasonal Amplitude = 0.496

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 170

Series begins @ SEP 19 1975
Series ends @ AUG 12 1993

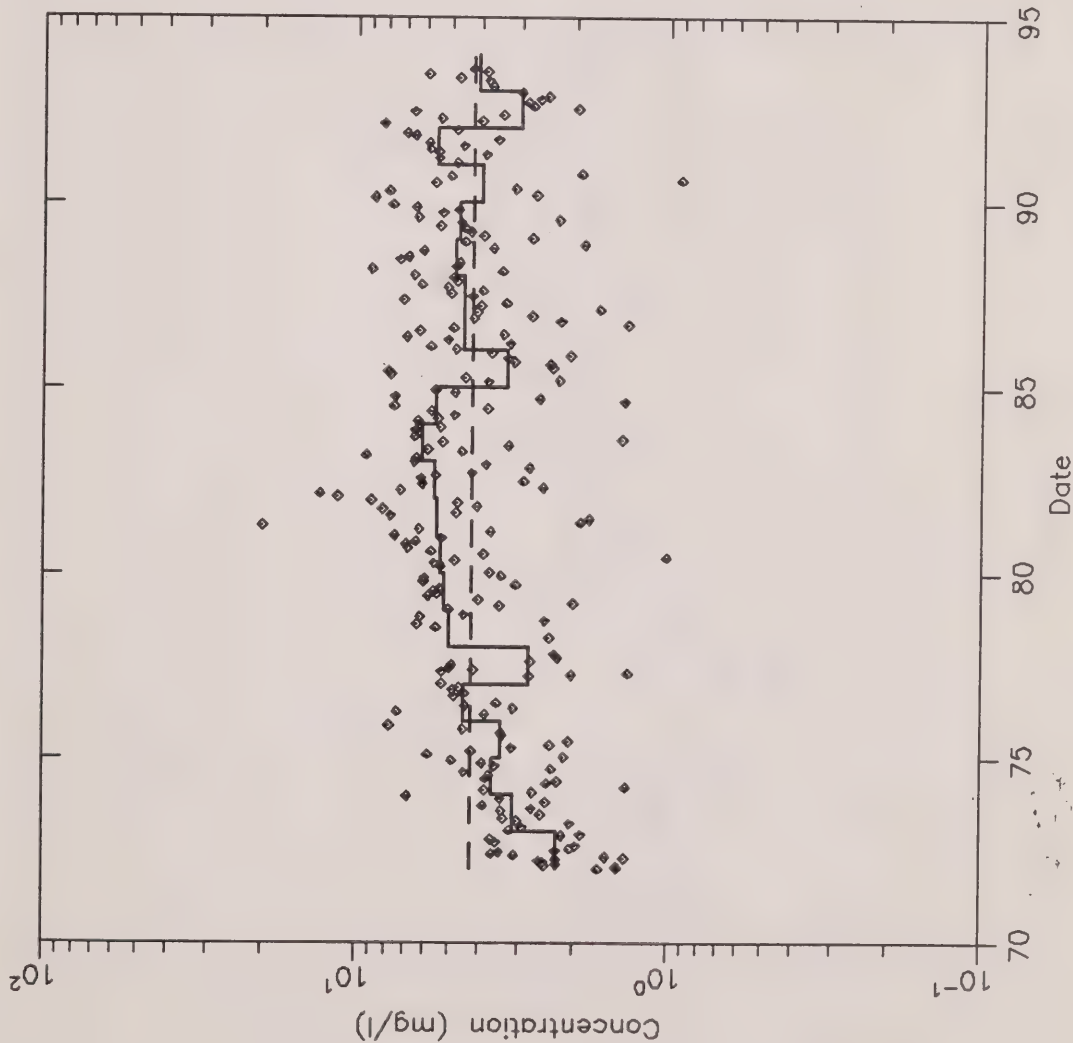
% Variation due to seasonal = 85.0

Data file: NNOT013.FTM
Parameter: NNOTFR
Site: 06007601302

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Nitrates (mg/l)

Black Ck. at 1st. Conc. u/s from Limehouse



Run #2: 2 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 4.243

Maximum trend @ 1983 = 6.122
Minimum trend @ 1972 = 2.259
Trend range = 3.863

Observations = 244
Series begins @ JAN 5 1972
Series ends @ AUG 12 1993
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

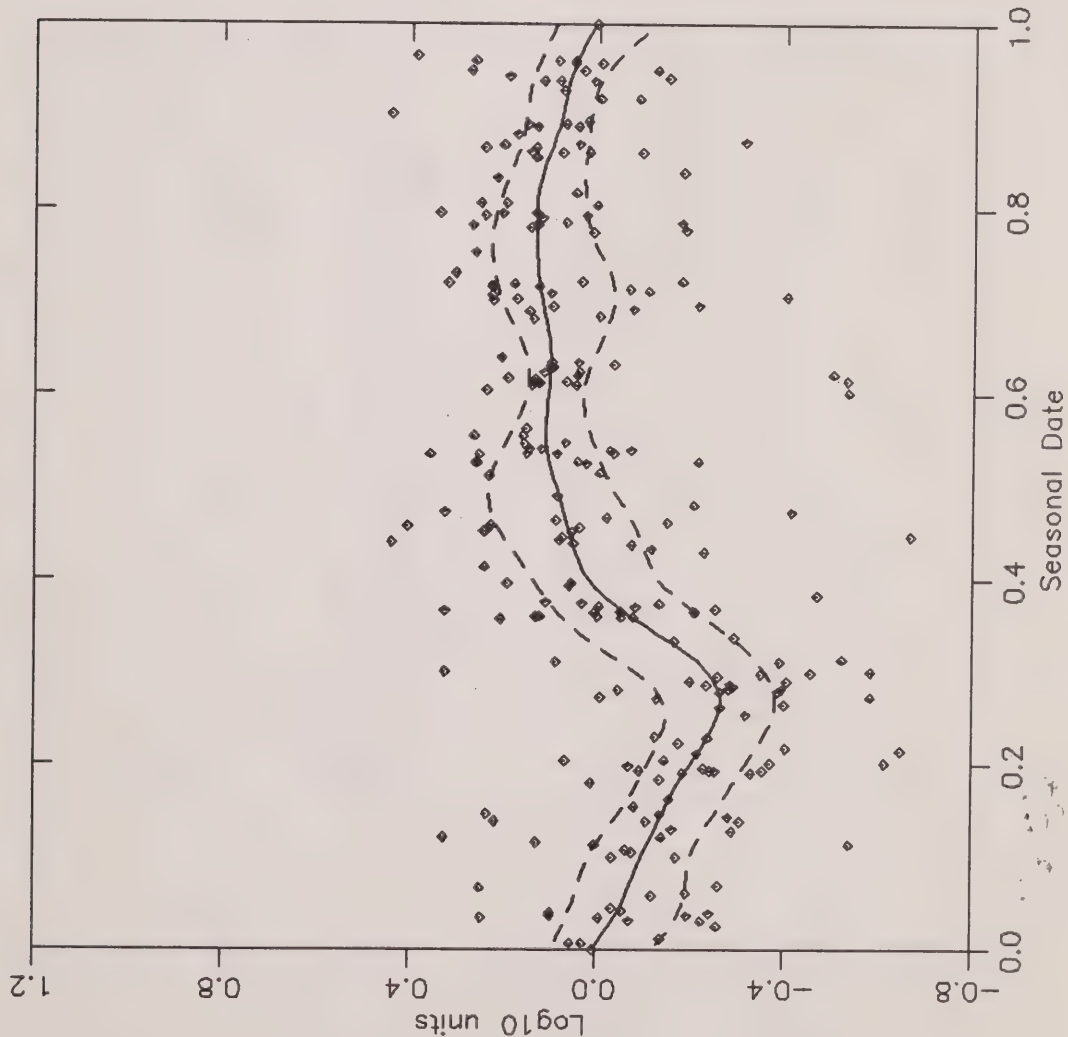
TREND TEST ON ANNUAL MEDIAN:
Spearman RHO = 0.248
 $p(\text{RHO}) = 0.266$ dof = 20
% Variation due to trend = 21.3

Data file: NNOT008.FTM
Parameter: NNOTFR
Site: 06007600802

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Nitrates (mg/l)

Black Ck. at 1st. Conc. u/s from Limehouse



Run #2: 2 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ OCT 16
Seasonal Min @ APR 9
Seasonal Amplitude = 0.396

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 244

Series begins @ JAN 5 1972
Series ends @ AUG 12 1993

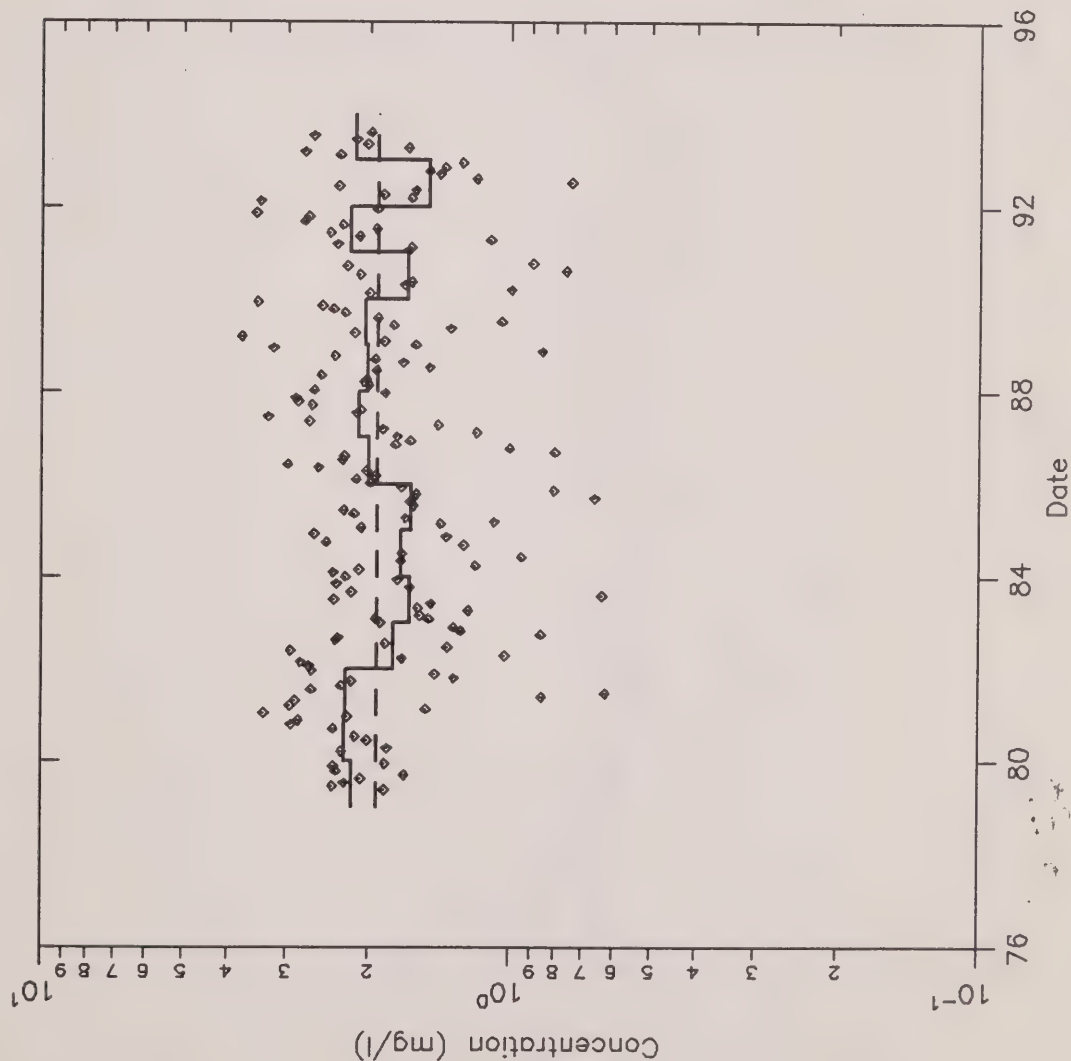
% Variation due to seasonal = 30.3

Data file: NNOT008.FTM
Parameter: NNOTFR
Site: 06007600802

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. West Br. at Cty. Rd. 13, Georgetown



Run #2: 1 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
- - Geometric mean annual median
= 1.920

Maximum trend @ 1980 = 2.254
Minimum trend @ 1992 = 1.493
Trend range = 0.761

Observations = 162
Series begins @ MAY 24 1979
Series ends @ AUG 12 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

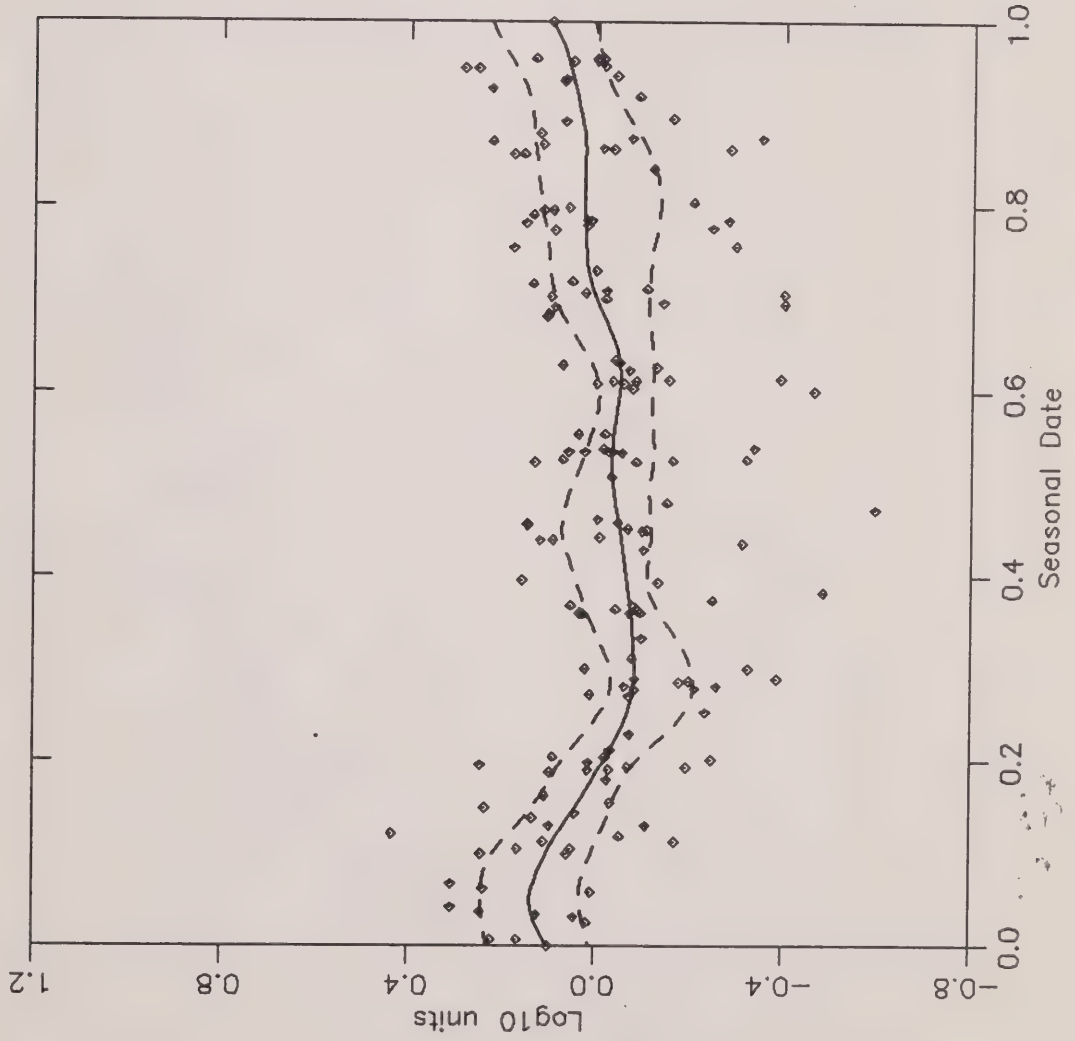
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = -0.257
p(RHO) = 0.355 dof = 13
% Variation due to trend = 11.5

Data file: NNOT022.FTM
Parameter: NNOTFR
Site: 06007602202

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. West Br. at Cty. Rd. 13, Georgetown



Run #2: 1 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JAN 19
Seasonal Min @ APR 20
Seasonal Amplitude = 0.220

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 162

Series begins @ MAY 24 1979
Series ends @ AUG 12 1993

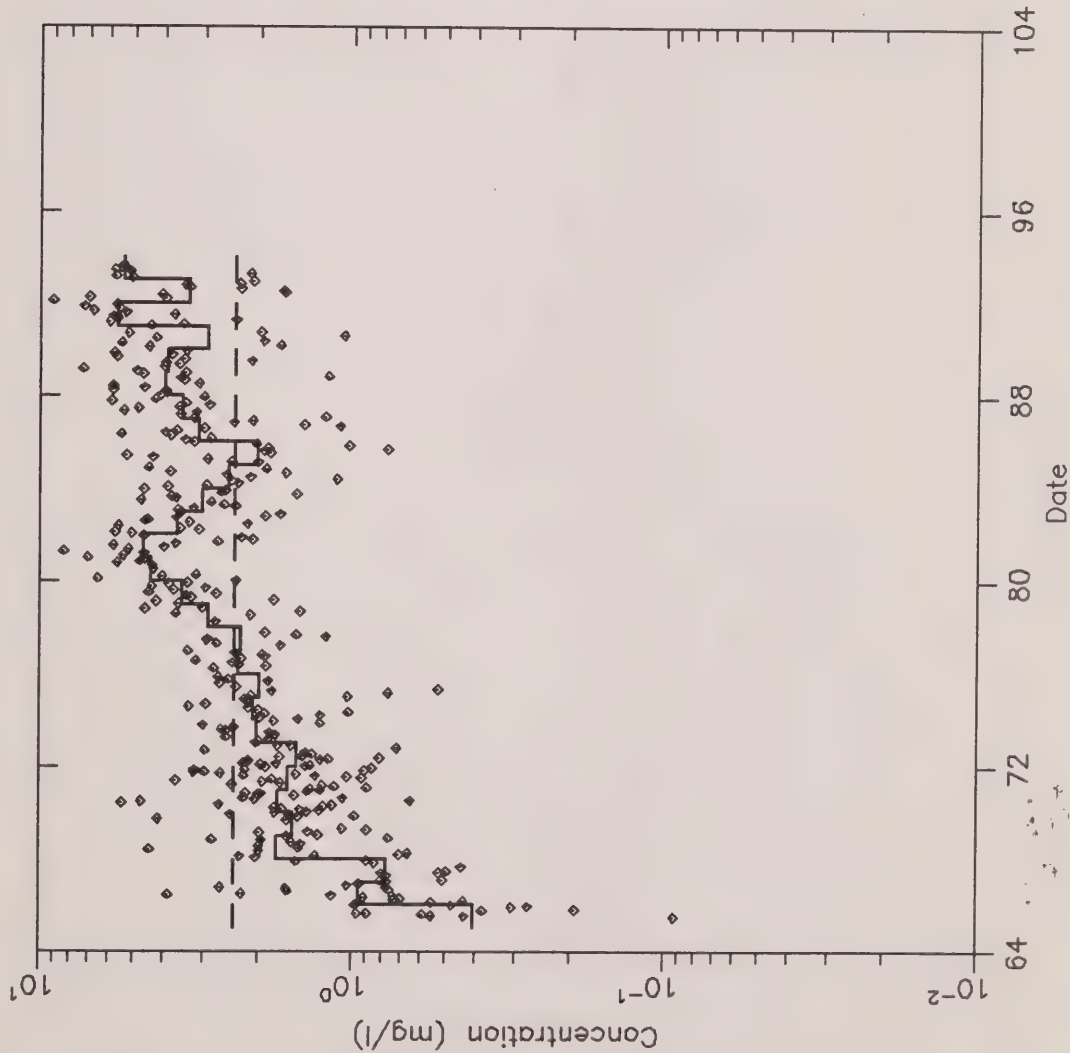
% Variation due to seasonal = 20.3

Data file: NNOT022.FTM
Parameter: NNOTFR
Site: 06007602202

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. West Br. at Hwy. 7, Norval



Run #2: 4 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
- - - Geometric mean annual median
= 2.378

Maximum trend @ 1991 = 5.627
Minimum trend @ 1965 = 0.407
Trend range = 5.221

Observations = 350
Series begins @ JUN 30 1965
Series ends @ AUG 12 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

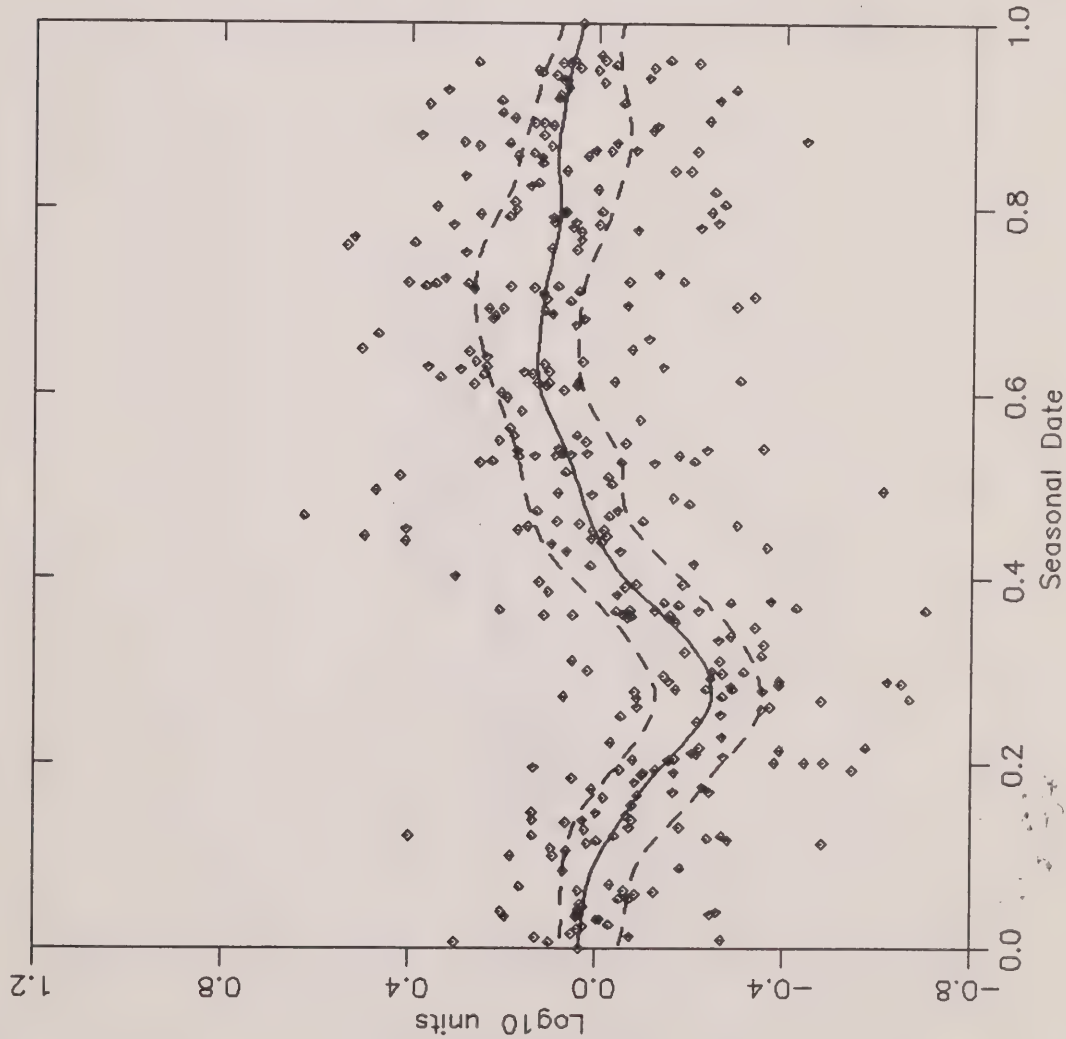
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.845
 $p(RHO) = 0.000$ dof = 27
% Variation due to trend = 63.0

Data file: NN0T004.FTM
Parameter: NN0TFR
Site: 06007600402

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. West Br. at Hwy. 7, Norval



Run #2: 4 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ AUG 18
Seasonal Min @ APR 13
Seasonal Amplitude = 0.376

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 350

Series begins @ JUN 30 1965

Series ends @ AUG 12 1993

% Variation due to seasonal = 30.5

Data file: NNOT004.FTM

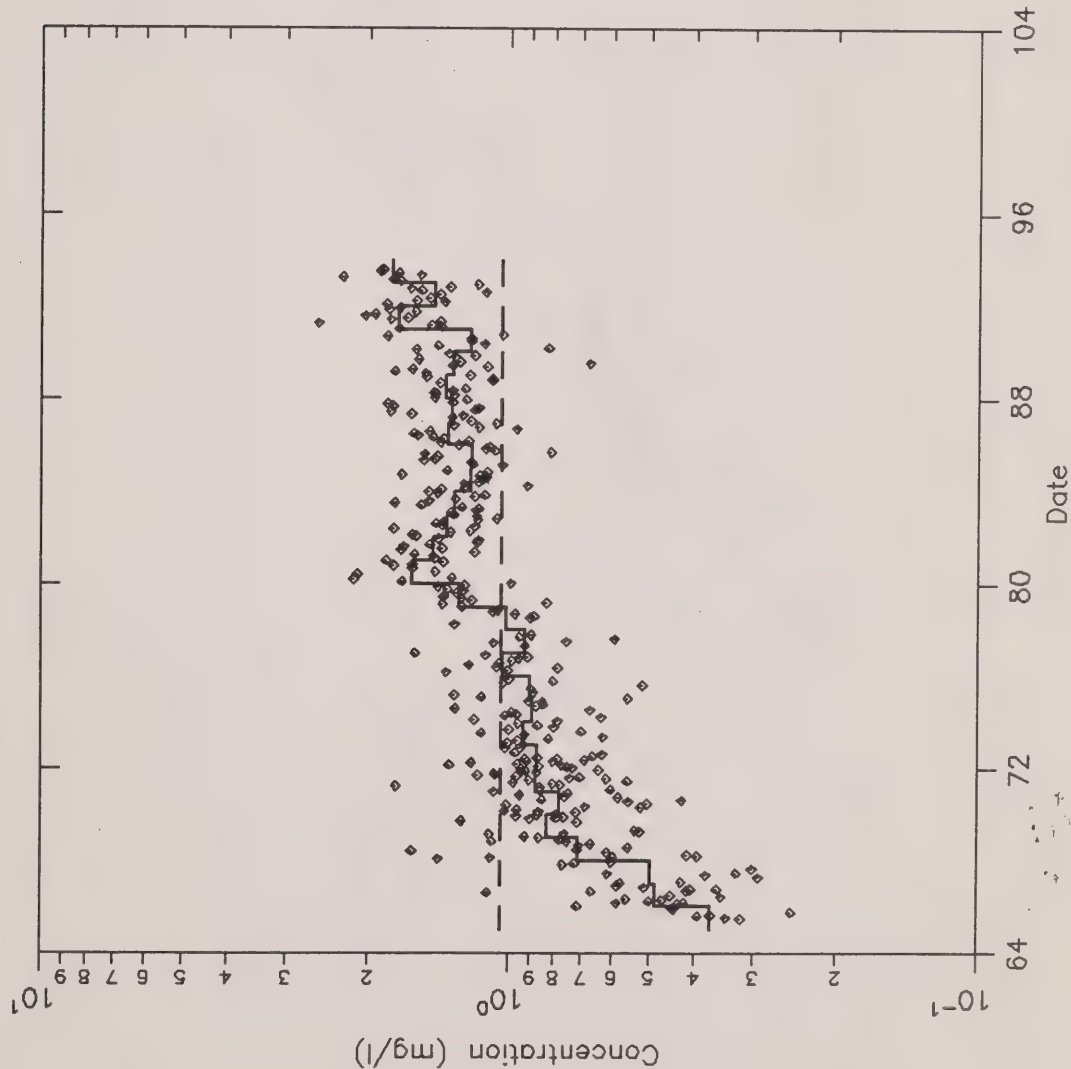
Parameter: NNOTFR

Site: 06007600402

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at Hwy. 7, Norval



Run #2: 11 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median

- - - Geometric mean annual median
= 1.038

Maximum trend @ 1993 = 1.786

Minimum trend @ 1965 = 0.370

Trend range = 1.416

Observations = 336

Series begins @ JUN 30 1965

Series ends @ AUG 12 1993

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:

Spearman RHO = 0.894

p(RHO) = 0.000 dof = 27

% Variation due to trend = 73.0

Data file: NN0T003.FTM

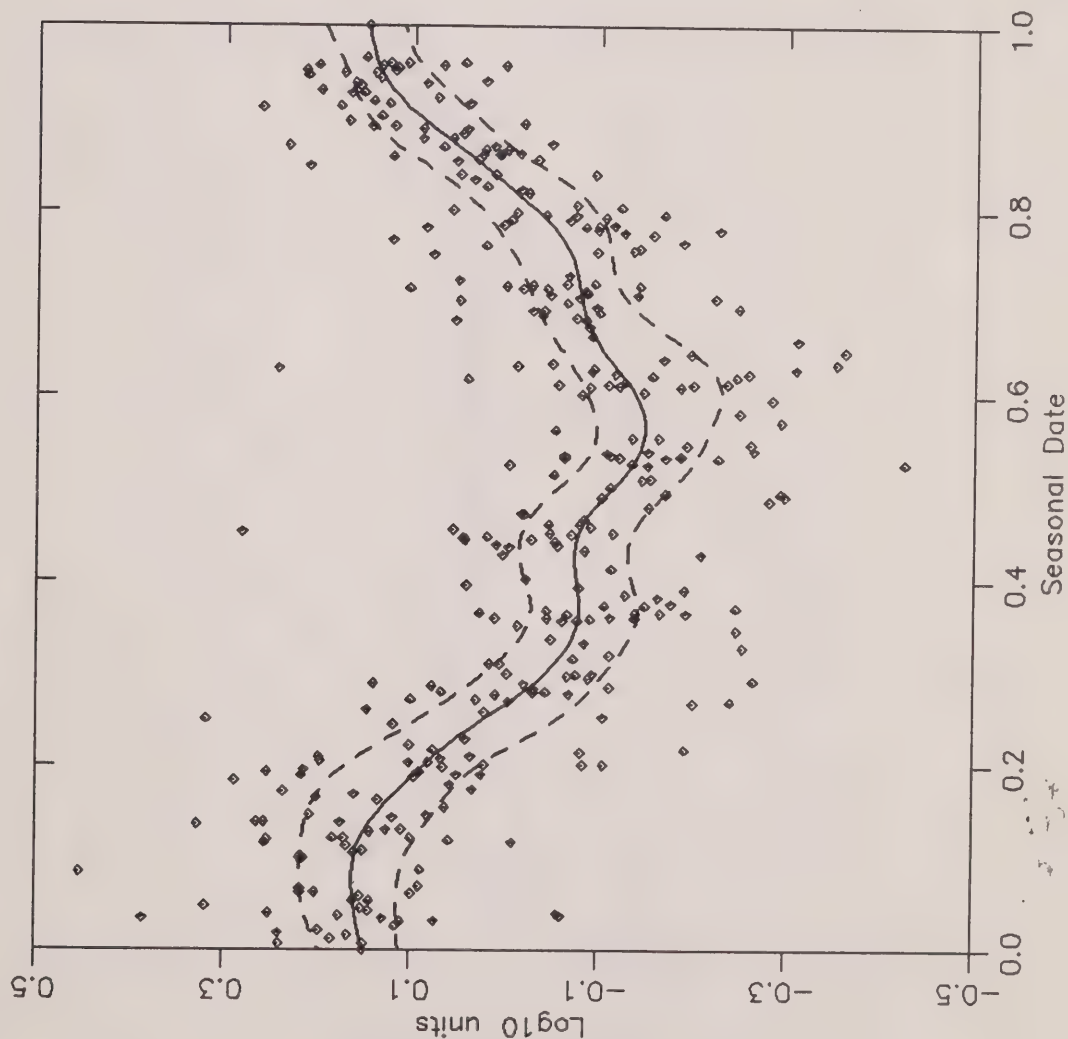
Parameter: NN0TFR

Site: 06007600302

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at Hwy. 7, Norval



Run #2: 11 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JAN 30
Seasonal Min @ JUL 28
Seasonal Amplitude = 0.310

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 336

Series begins @ JUN 30 1965

Series ends @ AUG 12 1993

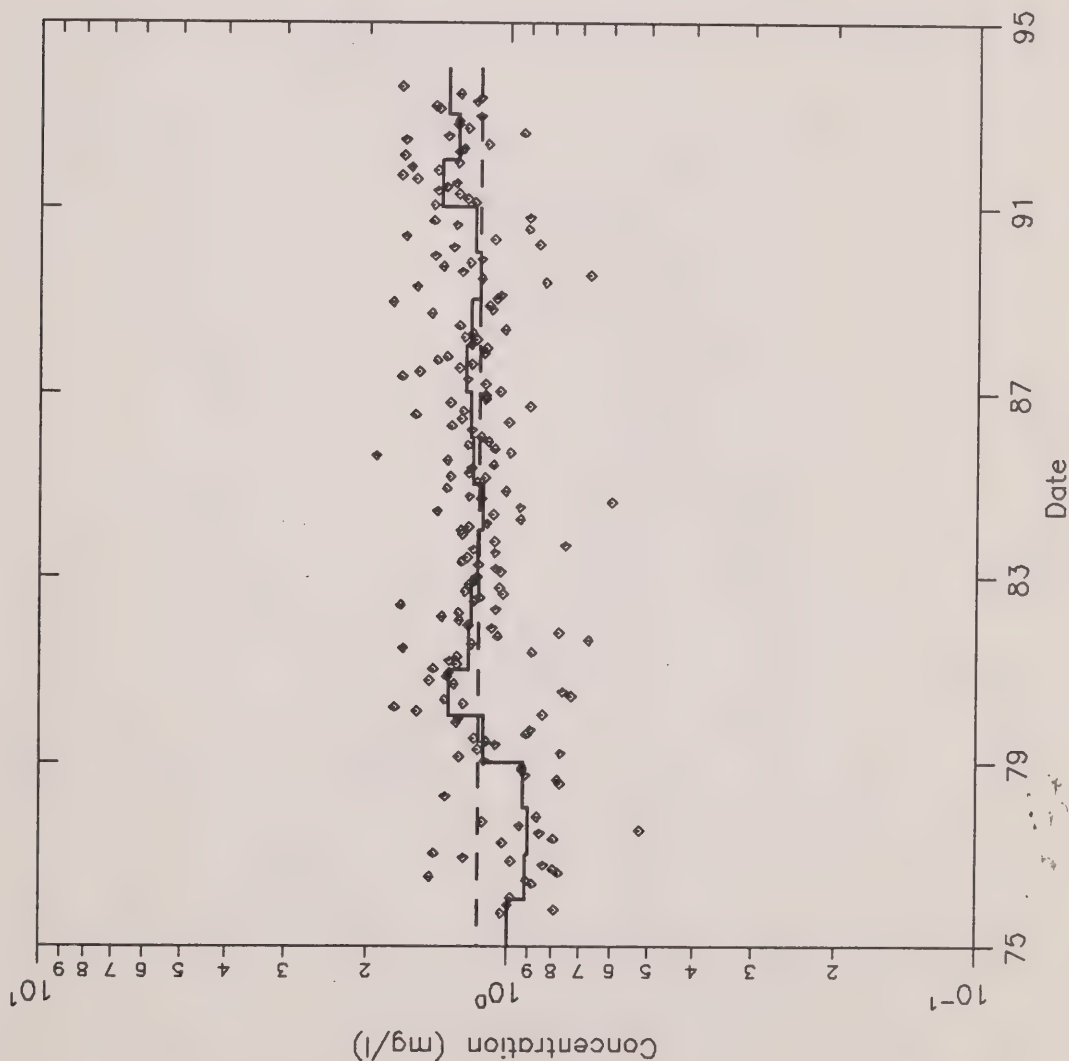
% Variation due to seasonal = 58.5

Data file: NNOT003.FTM
Parameter: NNOTFR
Site: 06007600302

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at Derry Rd., West of Hwy. 10



Run #2: 4 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 1.153

Maximum trend @ 1991 = 1.395
Minimum trend @ 1977 = 0.904
Trend range = 0.491

Observations = 187
Series begins @ SEP 19 1975
Series ends @ AUG 12 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

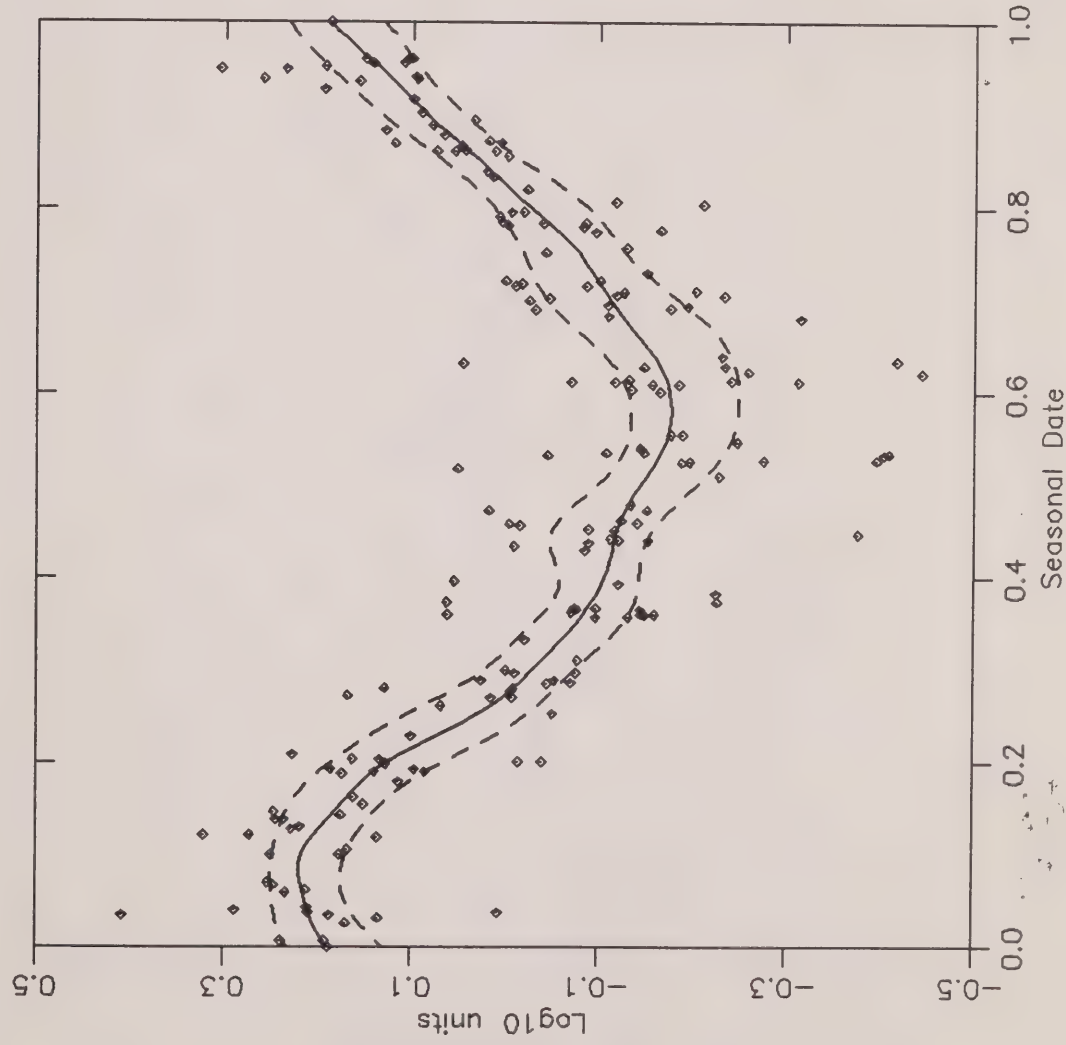
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = 0.700
 $p(RHO) = 0.001$ dof = 17
% Variation due to trend = 21.4

Data file: NNOT017.FTM
Parameter: NNOTFR
Site: 06007601702

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at Derry Rd., West of Hwy. 10



Run #2: 4 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JAN 30
Seasonal Min @ JUL 31
Seasonal Amplitude = 0.397
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

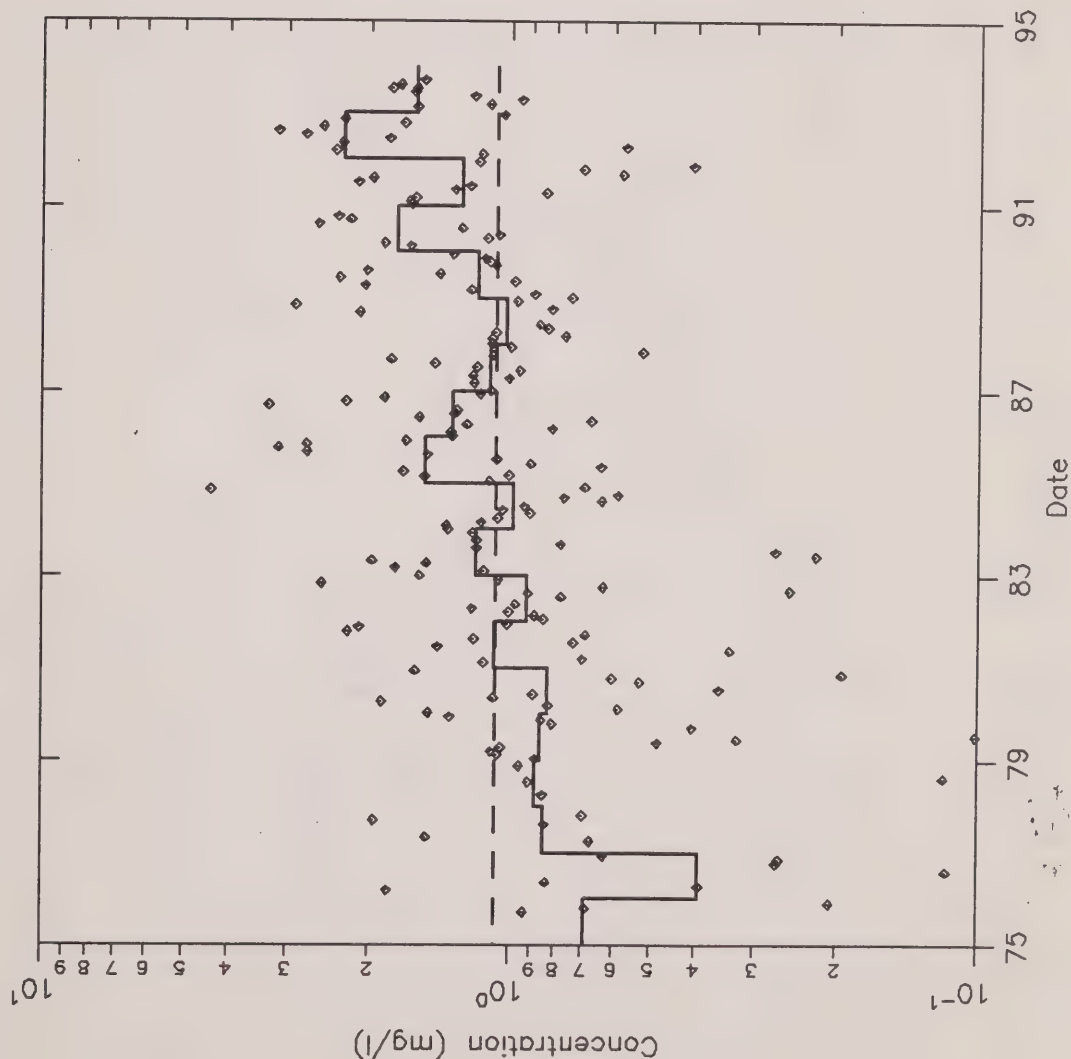
Observations = 187
Series begins @ SEP 19 1975
Series ends @ AUG 12 1993
% Variation due to seasonal = 73.8

Data file: NNOT017.FTM
Parameter: NNOTFR
Site: 06007601702

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Nitrates (mg/l)

Fletcher's Ck. at Steeles Ave., Brampton



Run #2: 12 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
- - Geometric mean annual median
= 1.067

Maximum trend @ 1992 = 2.282
Minimum trend @ 1976 = 0.393
Trend range = 1.889

Observations = 182
Series begins @ SEP 19 1975
Series ends @ SEP 16 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

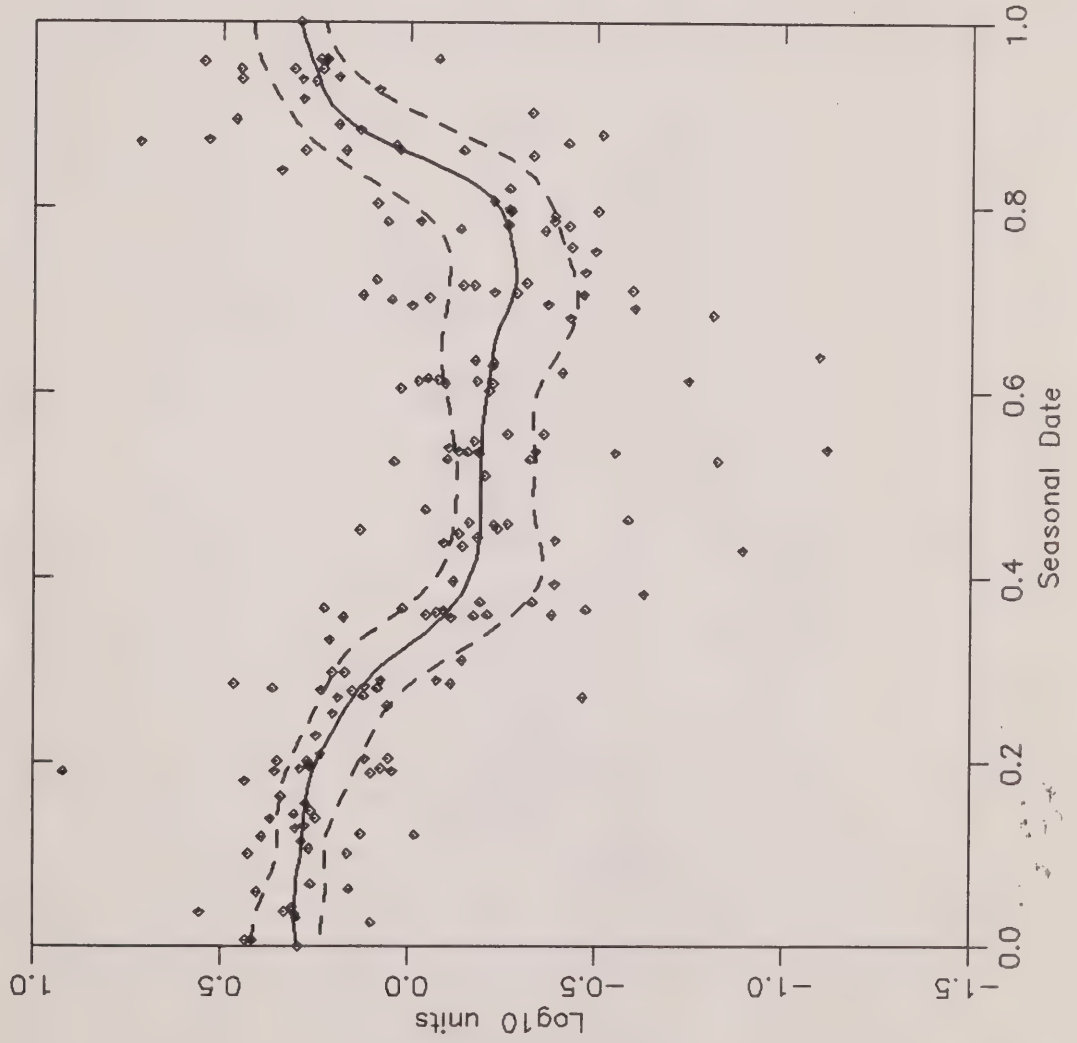
TREND TEST ON ANNUAL MEDIAN:
Spearman RHO = 0.881
p(RHO) = 0.000 dof = 17
% Variation due to trend = 24.3

Data file: NNOT016.FTM
Parameter: NNOTFR
Site: 06007601602

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Nitrates (mg/l)

Fletcher's Ck. at Steeles Ave., Brampton



Run #2: 12 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JAN 11
Seasonal Min @ SEP 24
Seasonal Amplitude = 0.588
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

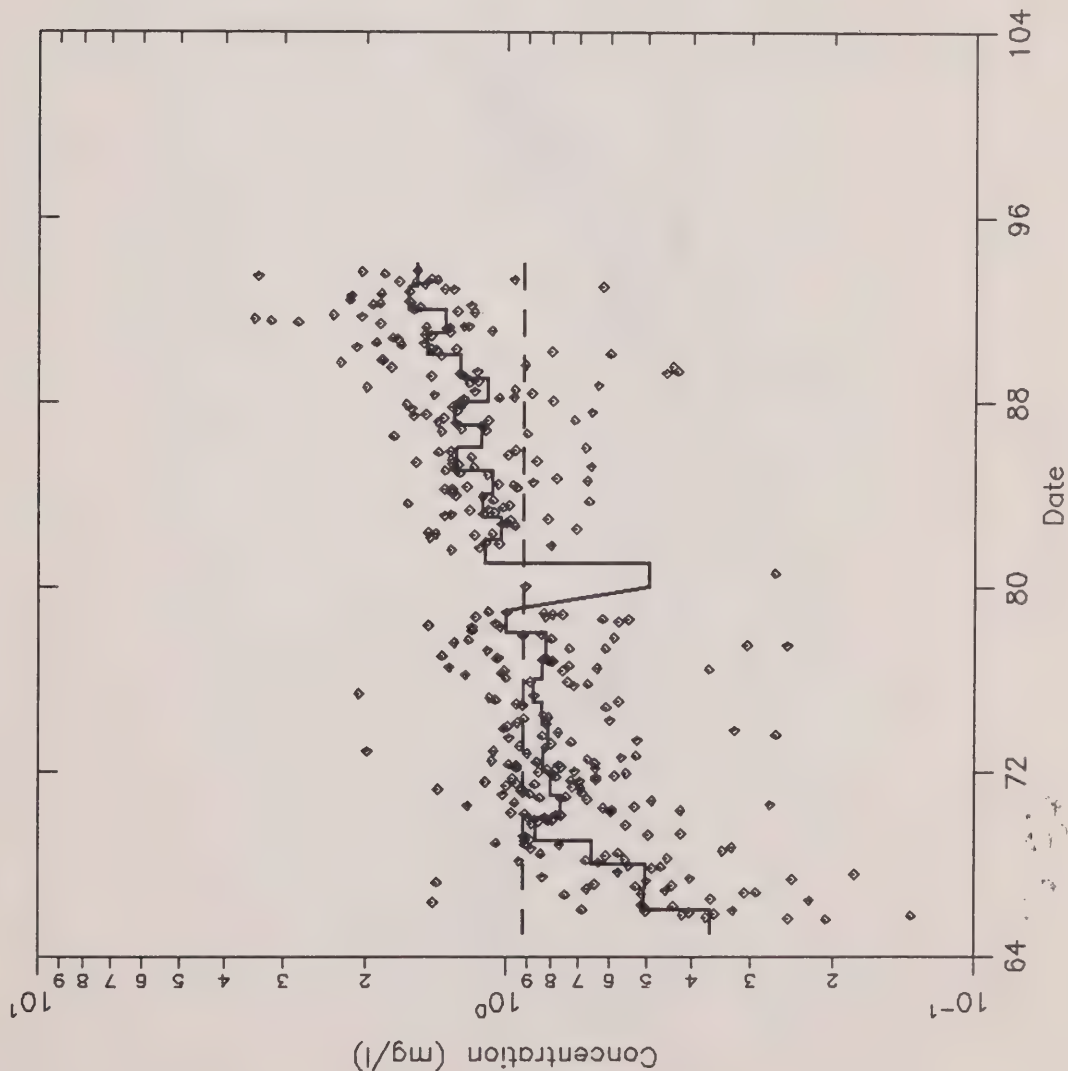
Observations = 182
Series begins @ SEP 19 1975
Series ends @ SEP 16 1993
% Variation due to seasonal = 50.7

Data file: NNOT016.FTM
Parameter: NNOTFR
Site: 06007601602

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at Hwy. 5, Erindale



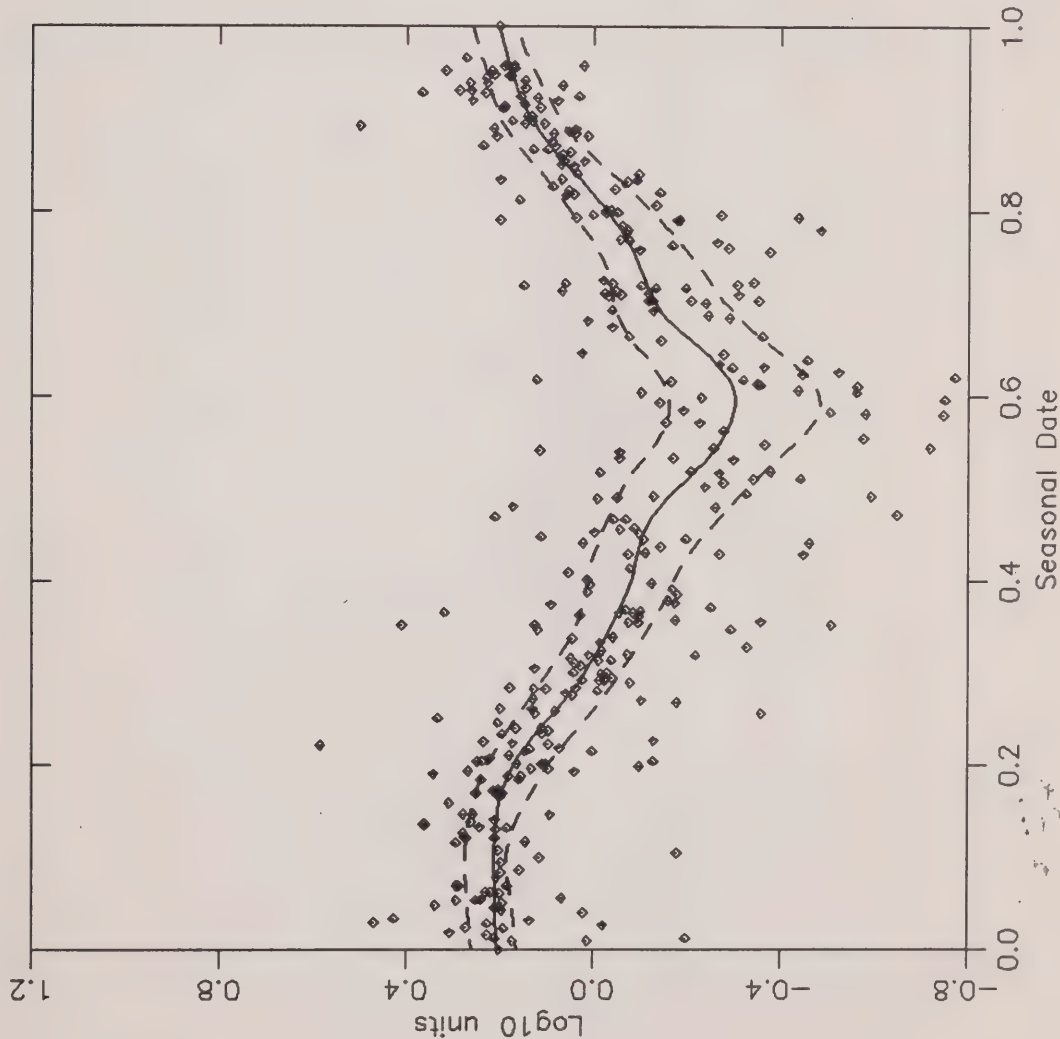
Run #2: 20 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

Data file: NNOT002.FTM
Parameter: NNOTFR
Site: 06007600202

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Nitrates (mg/l)

Credit R. at Hwy. 5, Erindale



Run #2: 20 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ FEB 2
Seasonal Min @ AUG 4
Seasonal Amplitude = 0.513

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 351

Series begins @ AUG 17 1965

Series ends @ SEP 14 1993

% Variation due to seasonal = 57.8

Data file: NN0T002.FTM

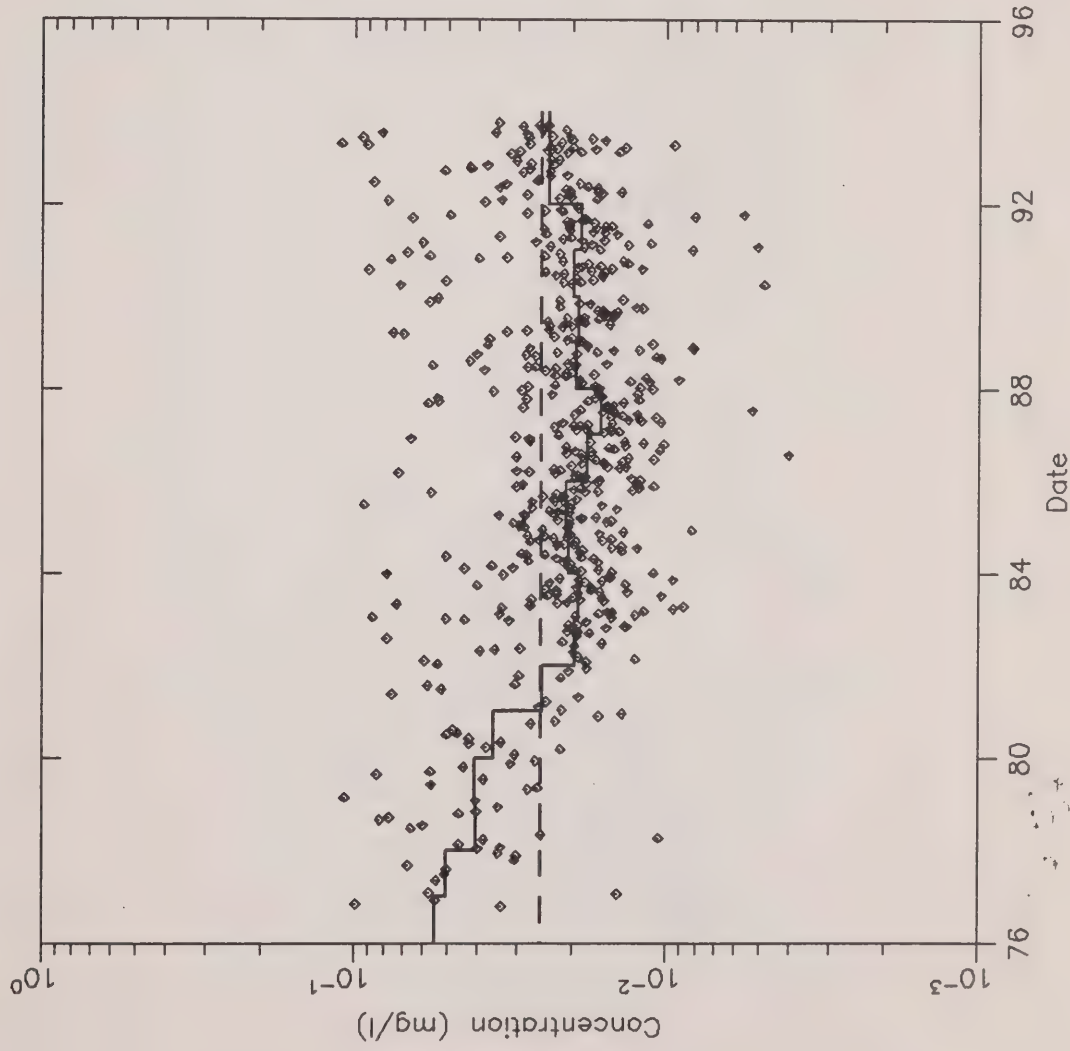
Parameter: NN0TFR

Site: 06007600202

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. at Southern Dam of Orangeville Reservoir



Run #2: 20 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 0.025

Maximum trend @ 1976 = 0.055
Minimum trend @ 1987 = 0.016
Trend range = 0.039

Observations = 561
Series begins @ OCT 20 1976
Series ends @ OCT 4 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

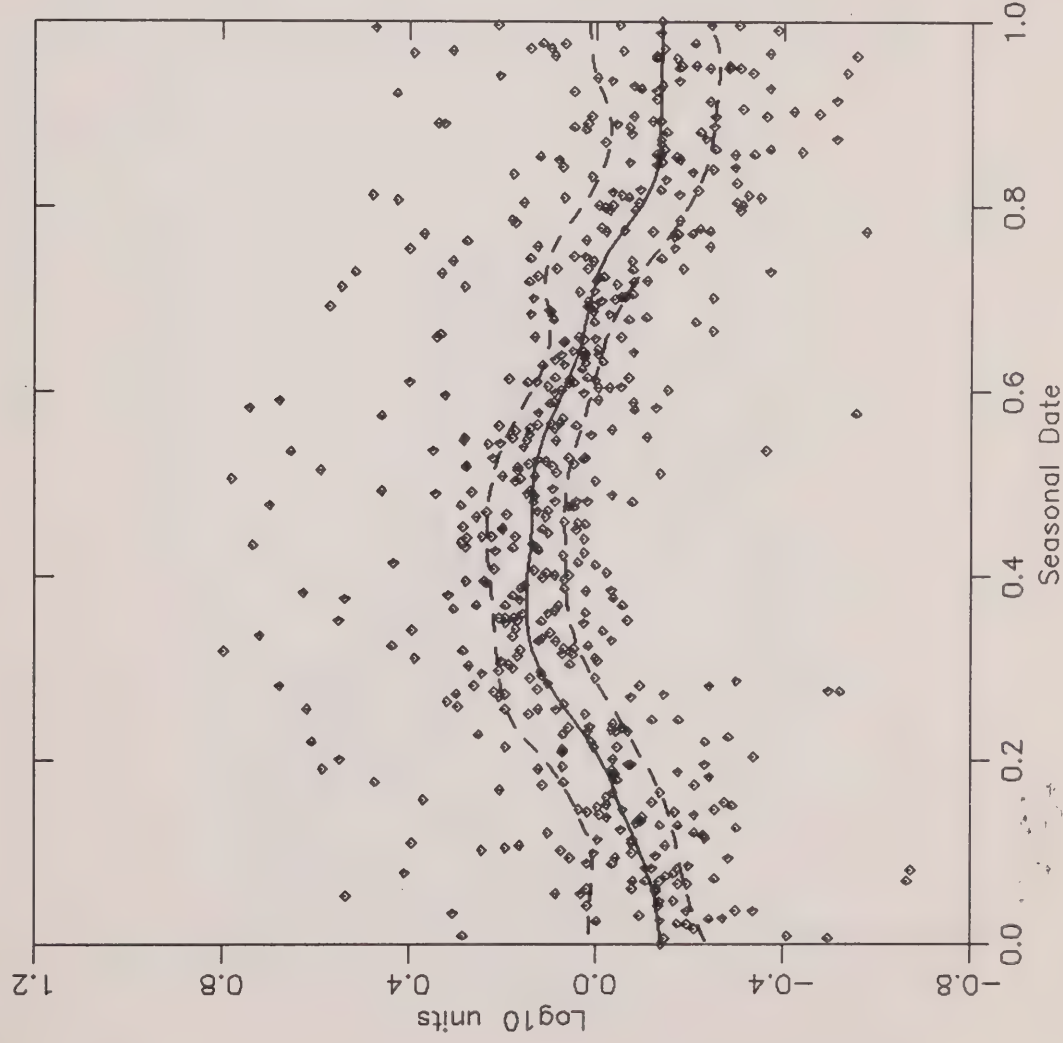
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = -0.627
p(RHO) = 0.005 dof = 16
% Variation due to trend = 21.3

Data file: PPUT019.FTM
Parameter: PPUT
Site: 06007601902

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. at Southern Dam of Orangeville Reservoir



Run #2: 20 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ MAY 16
Seasonal Min @ DEC 24
Seasonal Amplitude = 0.288
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

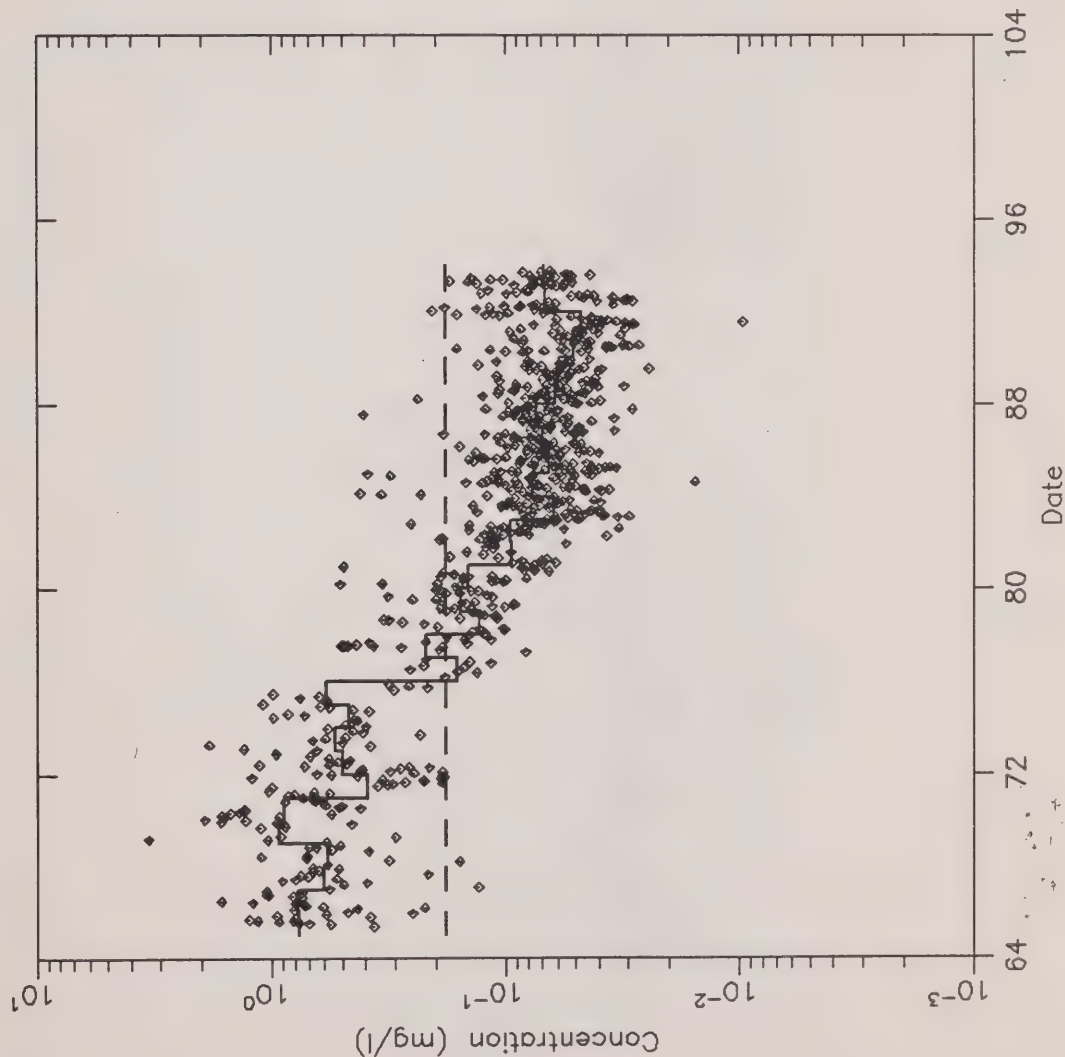
Observations = 561
Series begins @ OCT 20 1976
Series ends @ OCT 4 1993
% Variation due to seasonal = 23.9

Data file: PPUT019.FTM
Parameter: PPUT
Site: 06007601902

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. at Hwy. 10, d/s Orangeville STP



Run #2: 14 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median

- - - Geometric mean annual median
= 0.181

Maximum trend @ 1969 = 0.934
Minimum trend @ 1991 = 0.047
Trend range = 0.887

Observations = 772

Series begins @ MAY 17 1965

Series ends @ OCT 4 1993

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:

Spearman RHO = -0.937

p(RHO) = 0.000 dof = 27

% Variation due to trend = 83.3

Data file: PPUT006.FTM

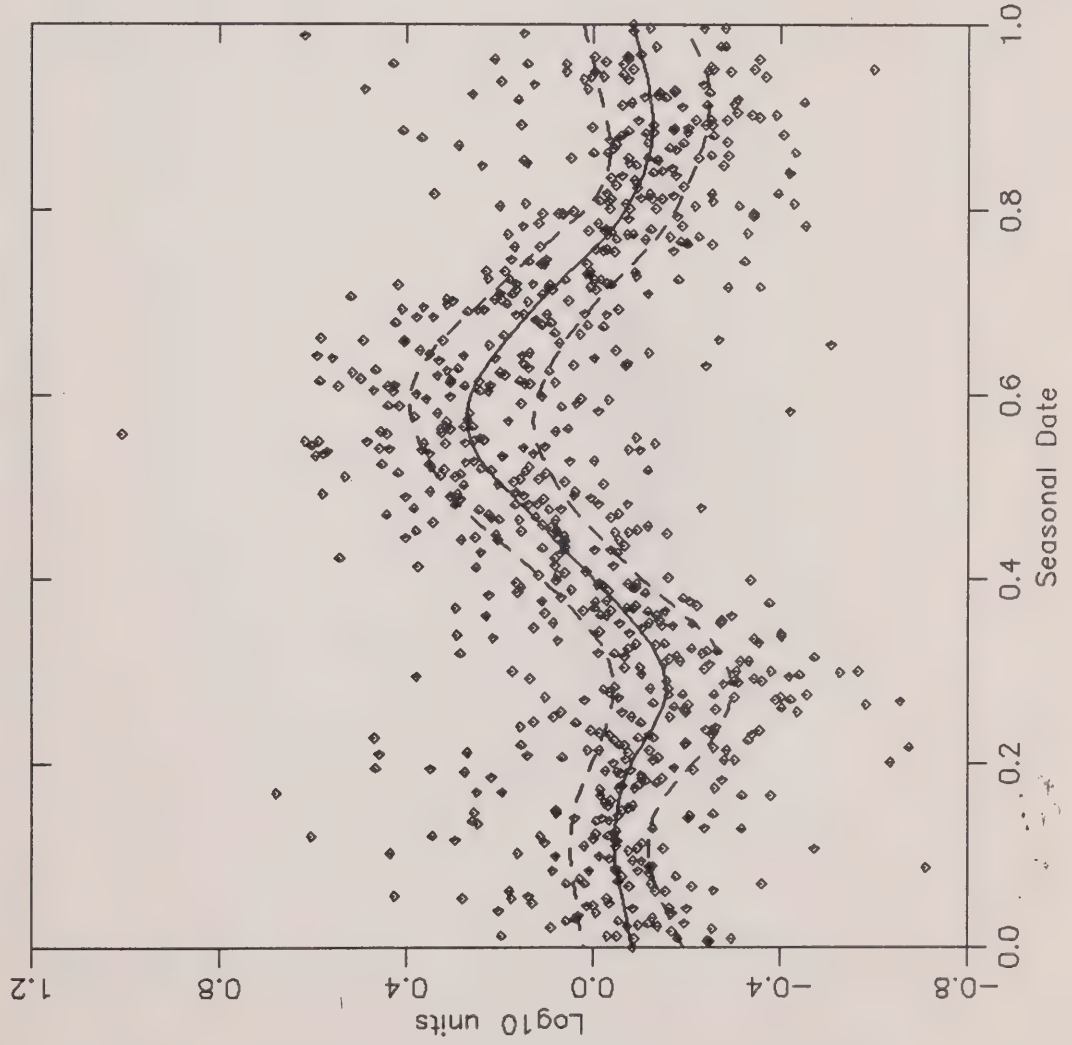
Parameter: PPUT

Site: 06007600602

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. at Hwy. 10, d/s Orangeville STP



Run #2: 14 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JUL 28
Seasonal Min @ APR 13
Seasonal Amplitude = 0.426

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 772
Series begins @ MAY 17 1965
Series ends @ OCT 4 1993

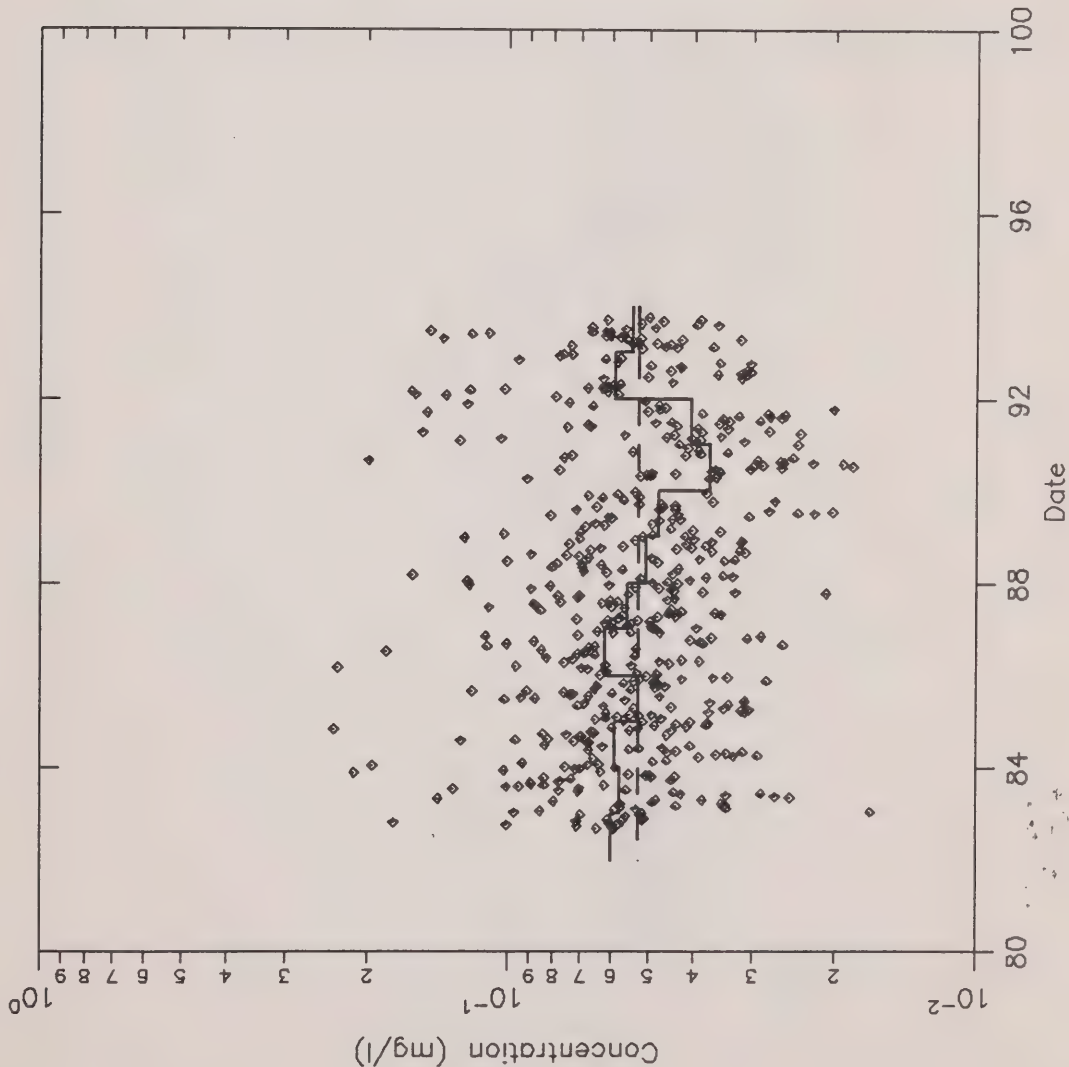
% Variation due to seasonal = 36.0

Data file: PPUT006.FTM
Parameter: PPUT
Site: 06007600602

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. at Hwy. 10, 2nd Bridge below Orangeville



Run #2: 9 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median

-- Geometric mean annual median
= 0.052

Maximum trend @ 1986 = 0.062

Minimum trend @ 1990 = 0.037

Trend range = 0.025

Observations = 500

Series begins @ SEP 8 1982

Series ends @ OCT 4 1993

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:

Spearman RHO = -0.476

p(RHO) = 0.118 dof = 10

% Variation due to trend = 7.6

Data file: PPUT024.FTM

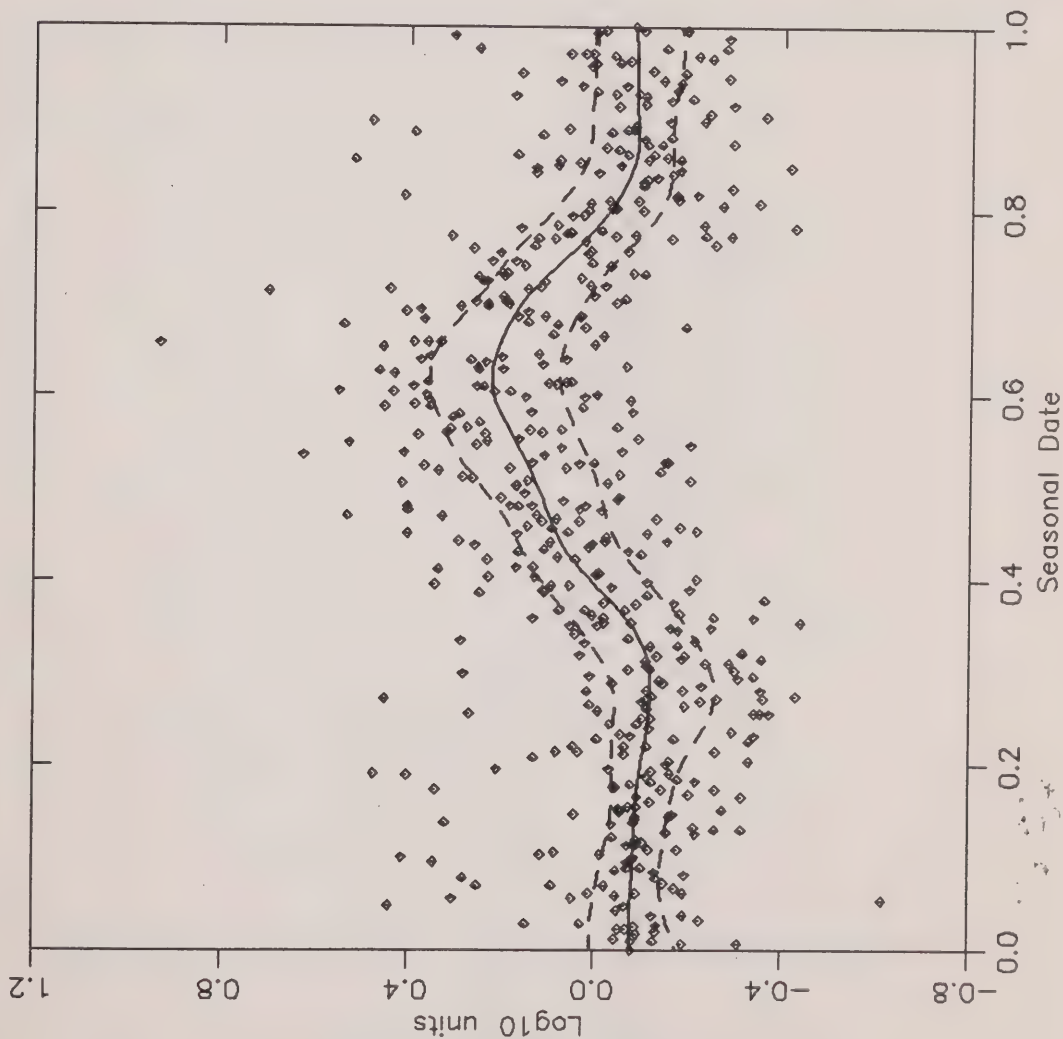
Parameter: PPUT

Site: 06007602402

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. at Hwy. 10, 2nd Bridge below Orangeville



Run #2: 9 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ AUG 15
Seasonal Min @ APR 13
Seasonal Amplitude = 0.342

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 500

Series begins @ SEP 8 1982

Series ends @ OCT 4 1993

% Variation due to seasonal = 31.4

Data file: PPUT024.FTM

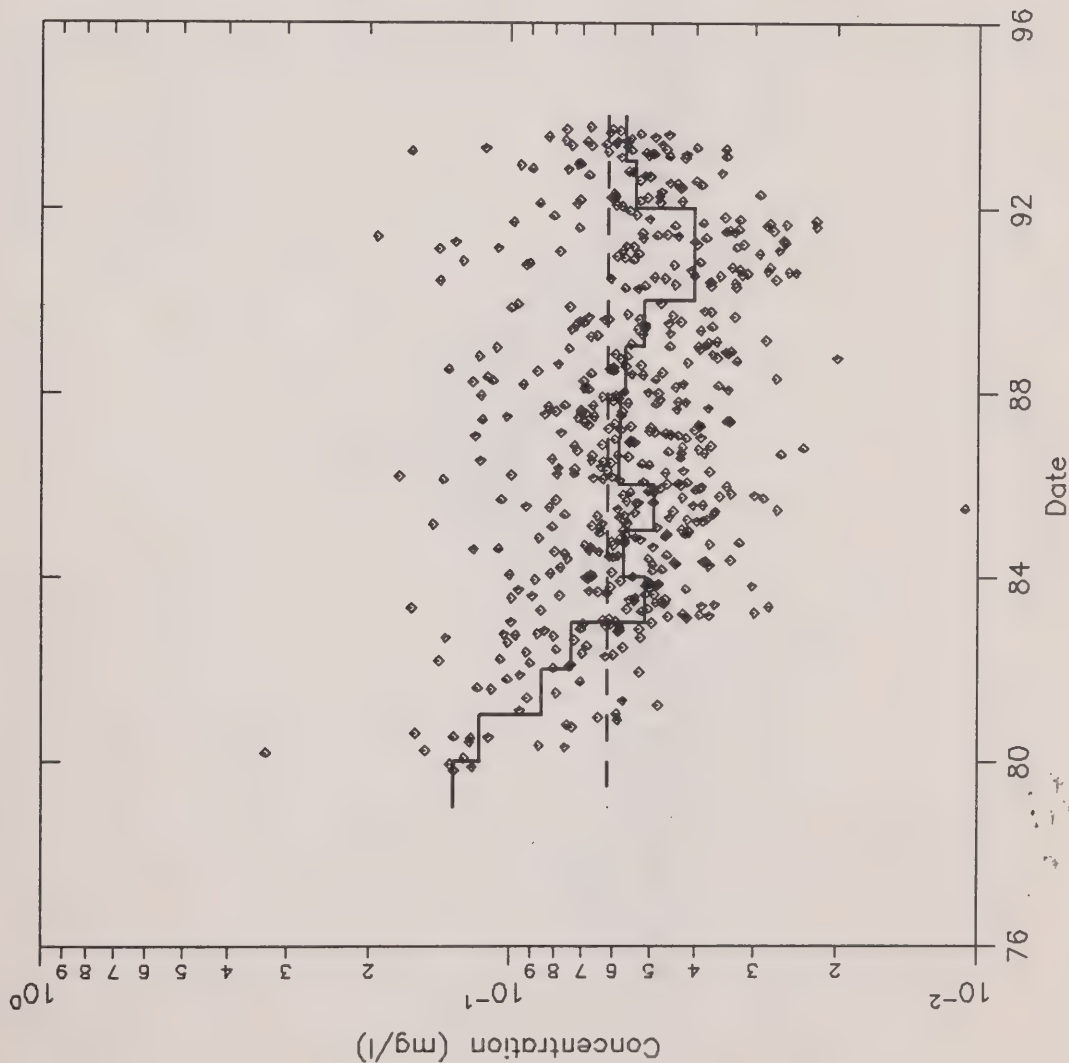
Parameter: PPUT

Site: 06007602402

TRENDS IN DE--SEASONALIZED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. at Melville



Run #2: 19 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 0.061

Maximum trend @ 1979 = 0.132
Minimum trend @ 1991 = 0.040
Trend range = 0.092

Observations = 529
Series begins @ OCT 23 1979
Series ends @ OCT 4 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = -0.700
p(RHO) = 0.004 dof = 13

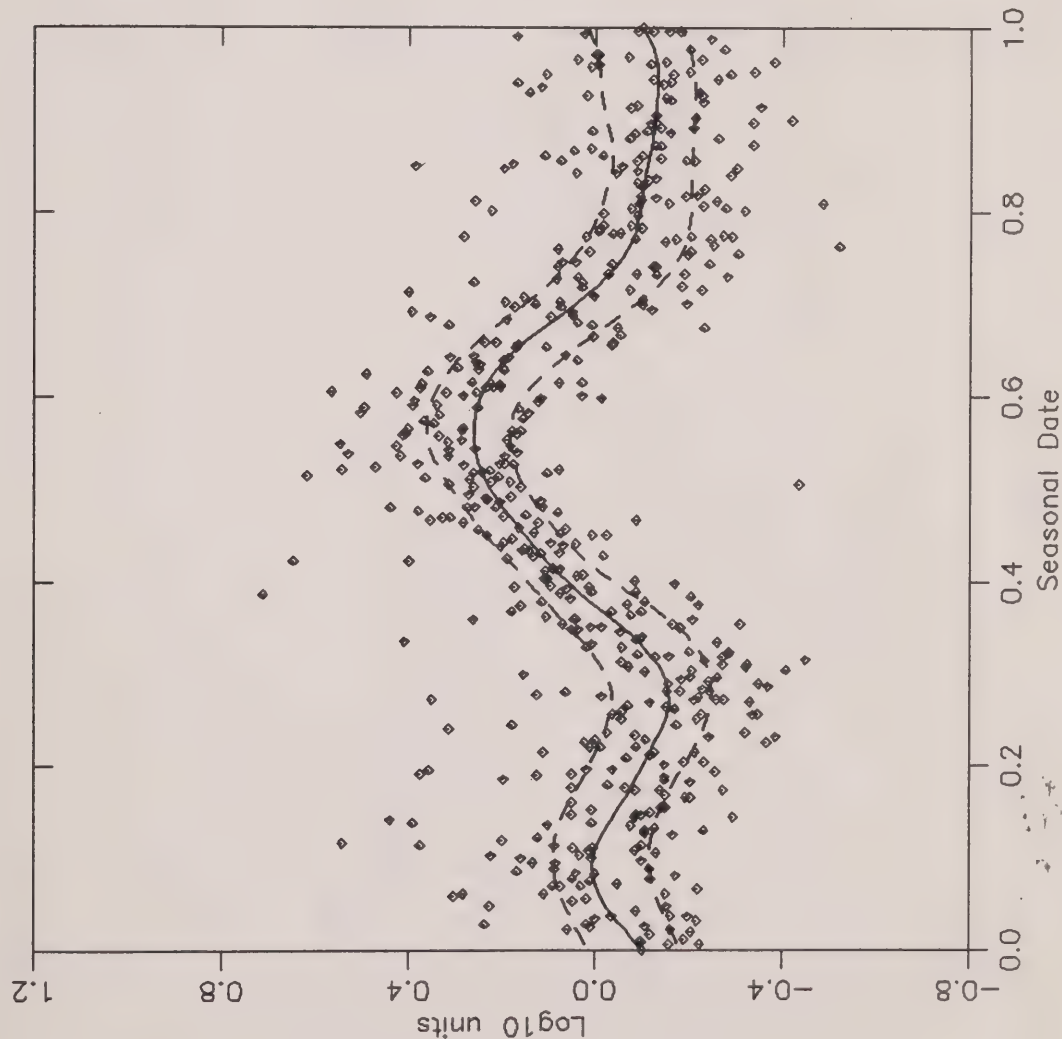
% Variation due to trend = 23.2

Data file: PPUT023.FTM
Parameter: PPUT
Site: 06007602302

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. at Melville



Run #2: 19 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JUL 24
Seasonal Min @ APR 9
Seasonal Amplitude = 0.418
Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

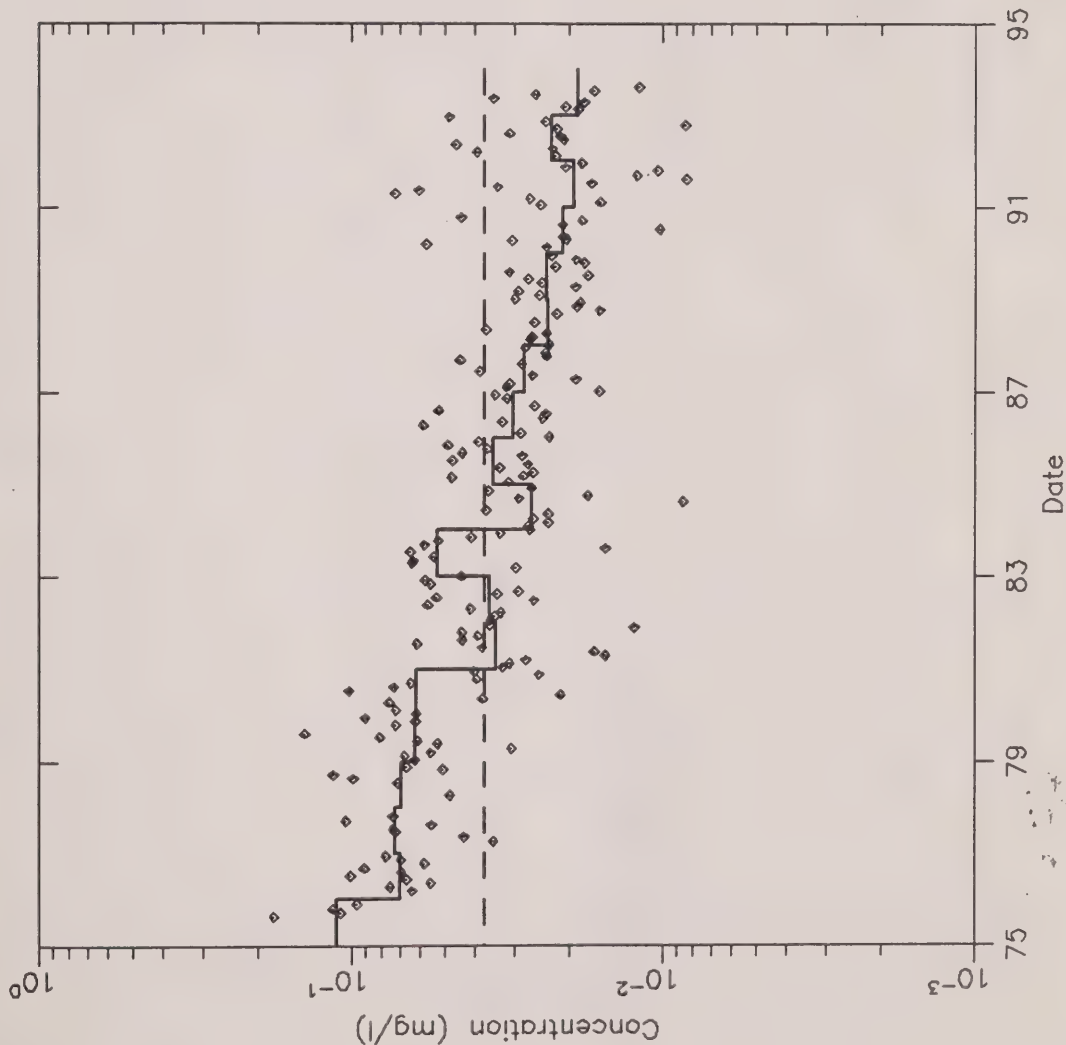
Observations = 529
Series begins @ OCT 23 1979
Series ends @ OCT 4 1993
% Variation due to seasonal = 46.5

Data file: PPUT023.FTM
Parameter: PPUT
Site: 06007602302

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. at 20th Sideroad, Caledon Twp.



Run #2: 3 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
- - Geometric mean annual median
= 0.037

Maximum trend @ 1975 = 0.112
Minimum trend @ 1993 = 0.019
Trend range = 0.093

Observations = 188
Series begins @ AUG 20 1975
Series ends @ AUG 12 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = -0.967
p(RHO) = 0.000 dof = 17

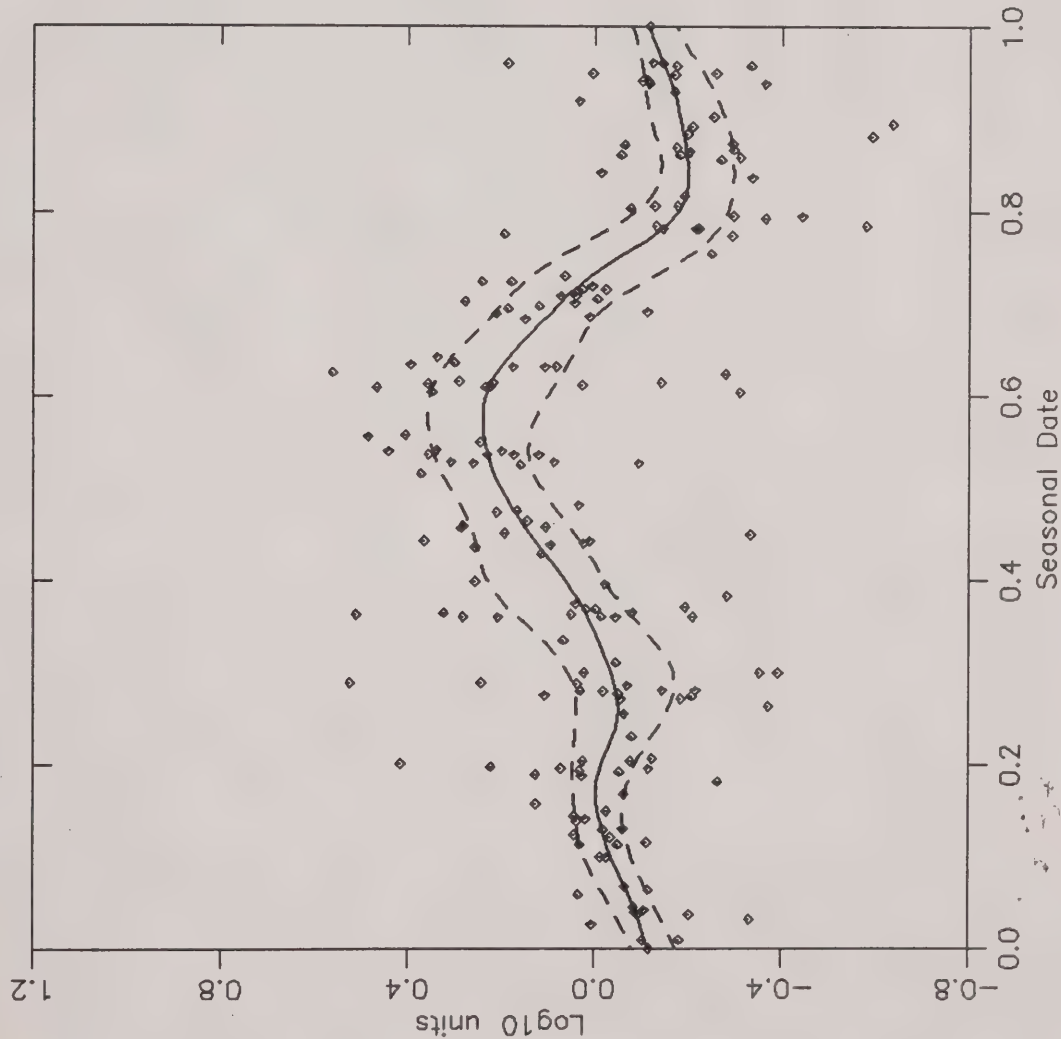
% Variation due to trend = 55.9

Data file: PPUT018.FTM
Parameter: PPUT
Site: 06007601802

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. at 20th Sideroad, Caledon Twp.



Run #2: 3 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JUL 31
Seasonal Min @ NOV 3
Seasonal Amplitude = 0.438

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 188

Series begins @ AUG 20 1975
Series ends @ AUG 12 1993

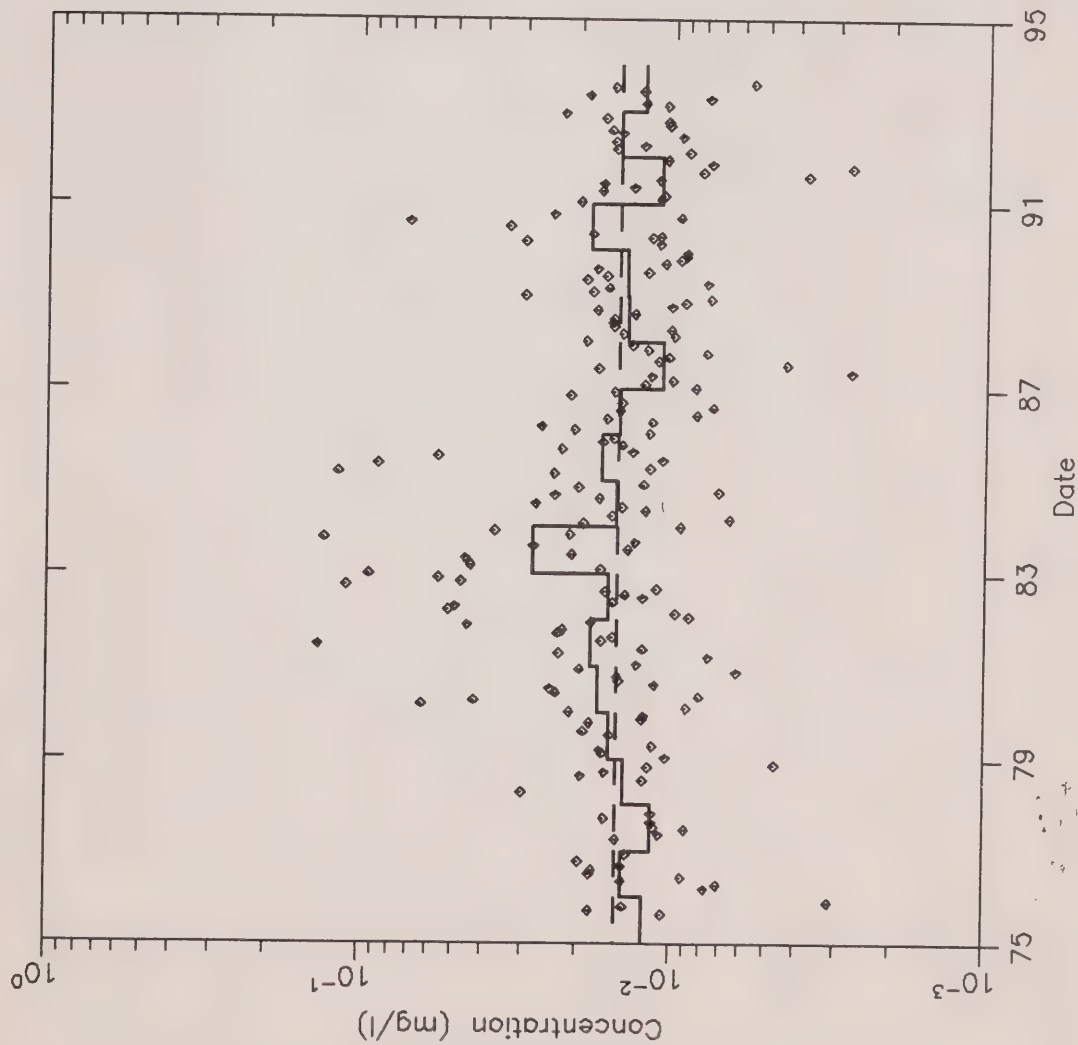
% Variation due to seasonal = 43.7

Data file: PPUT018.FTM
Parameter: PPUT
Site: 06007601802

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. Erin Br. at Wellington/Peel Cty. Boundary



Run #2: 5 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 0.015

Maximum trend @ 1983 = 0.028
Minimum trend @ 1987 = 0.011
Trend range = 0.017

Observations = 190
Series begins @ AUG 20 1975
Series ends @ AUG 12 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

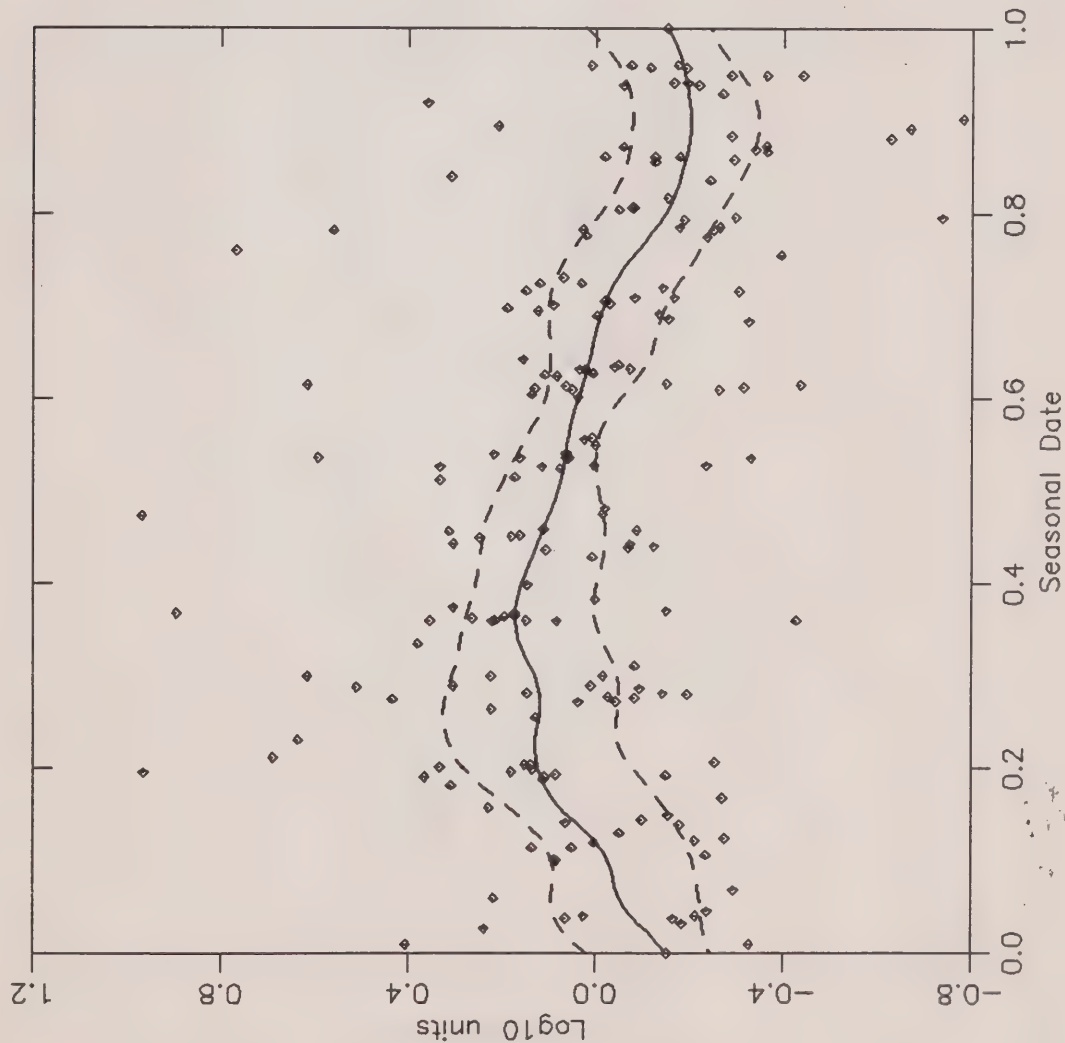
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = -0.091
p(RHO) = 0.710 dof = 17
% Variation due to trend = 20.9

Data file: PPUT015.FTM
Parameter: PPUT
Site: 06007601502

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. Erin Br. at Wellington/Peel Cty. Boundary



Run #2: 5 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ MAY 12
Seasonal Min @ NOV 25
Seasonal Amplitude = 0.374

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 190
Series begins @ AUG 20 1975
Series ends @ AUG 12 1993

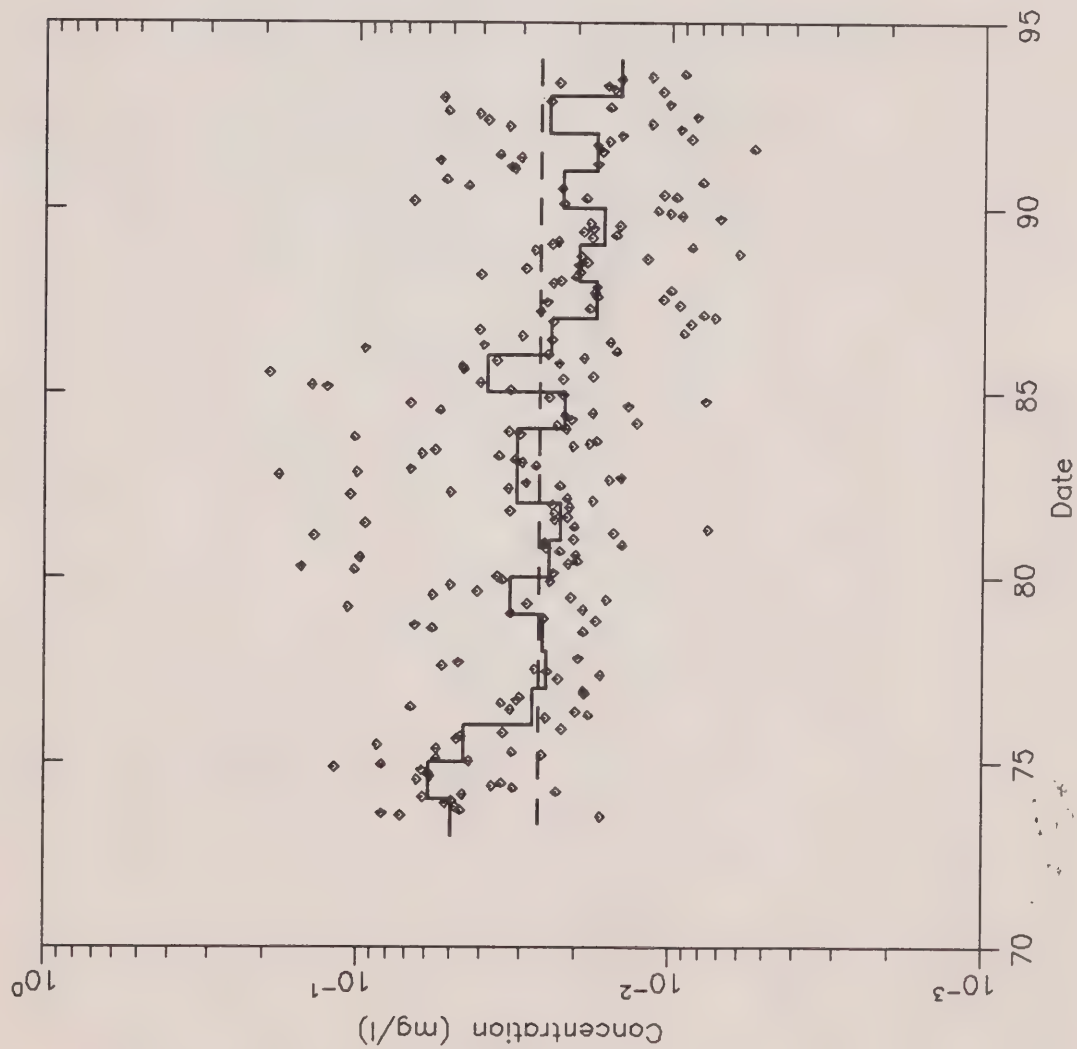
% Variation due to seasonal = 21.6

Data file: PPUT015.FTM
Parameter: PPUT
Site: 06007601502

TRENDS IN DE--SEASONALIZED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. At Cty. Rd. 9, Terra Cotta



Run #1:

Run date: December 13, 1993

pgm = TRX

— Annual median

- - Geometric mean annual median
= 0.026

Maximum trend @ 1974 = 0.059

Minimum trend @ 1993 = 0.015

Trend range = 0.044

Observations = 220

Series begins @ JUL 12 1973

Series ends @ AUG 12 1993

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:

Spearman RHO = -0.779

p(RHO) = 0.000 dof = 19

% Variation due to trend = 26.6

Data file: PPUT010.FTM

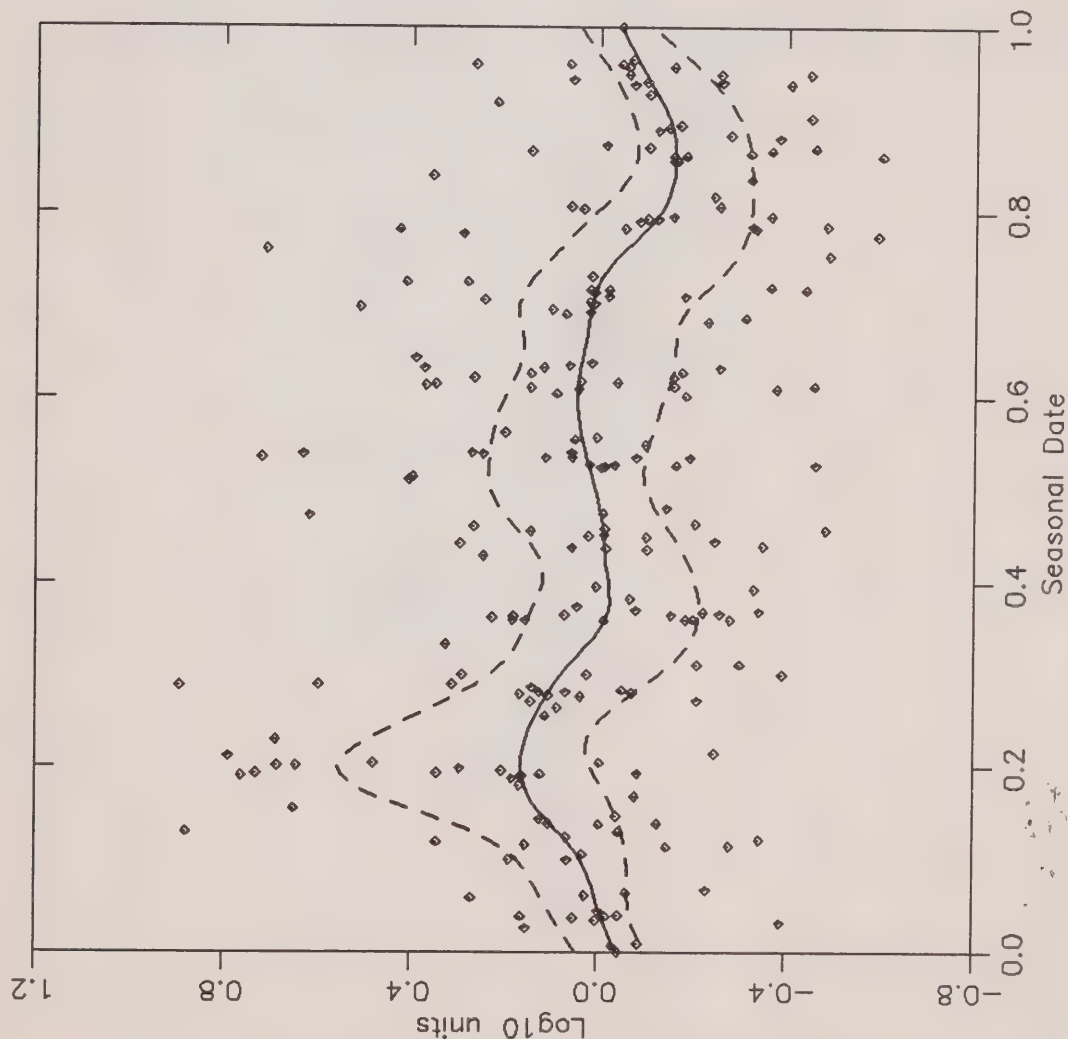
Parameter: PPUT

Site: 06007601002

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. At Cty. Rd. 9, Terra Cotta



Run #1:

Run date: December 13, 1993

pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ MAR 15

Seasonal Min @ NOV 10

Seasonal Amplitude = 0.325

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

Observations = 220

Series begins @ JUL 12 1973

Series ends @ AUG 12 1993

% Variation due to seasonal = 17.4

Data file: PPUT010.FTM

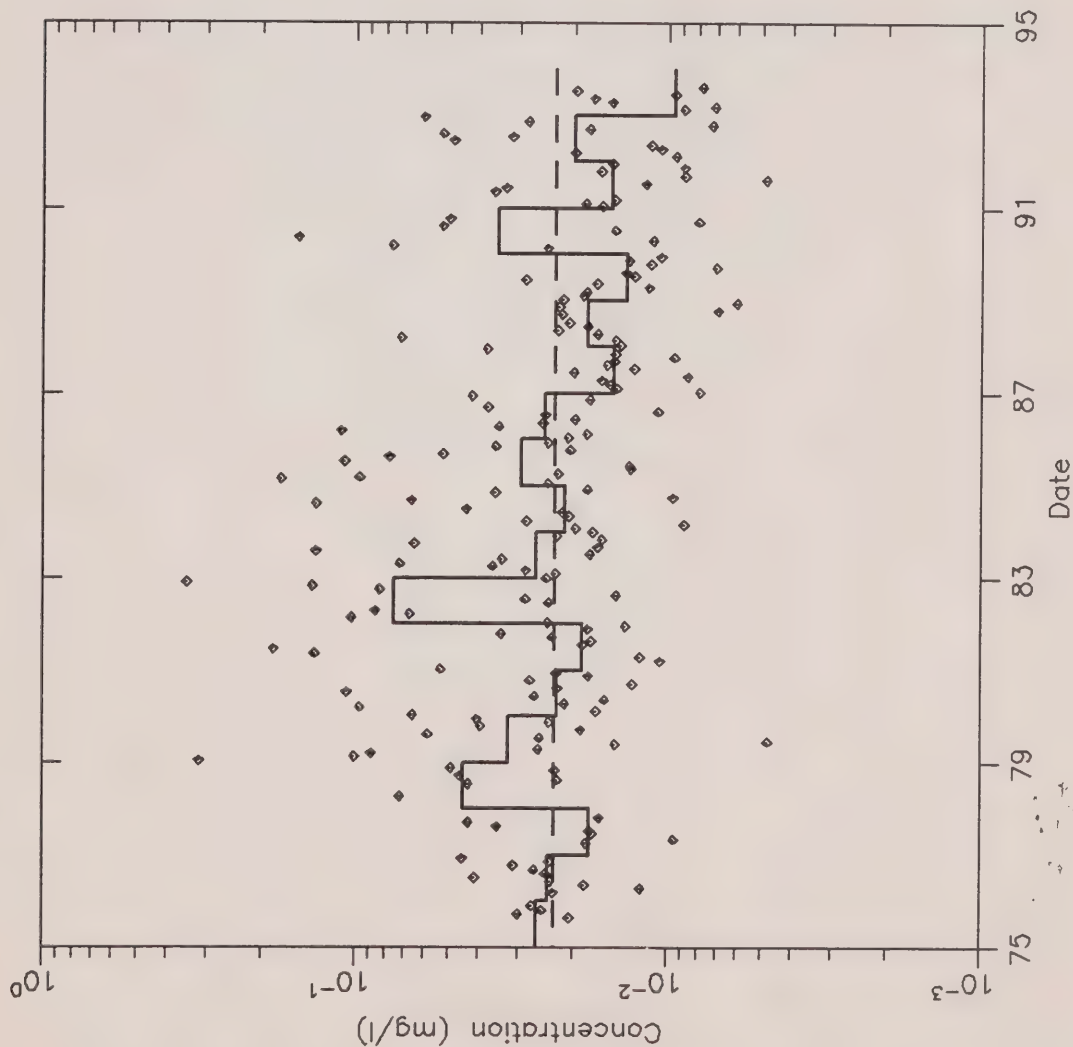
Parameter: PPUT

Site: 06007601002

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. at 22nd Sideroad, Glen Williams



Run #2: 1 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
- - Geometric mean annual median
= 0.023

Maximum trend @ 1982 = 0.075
Minimum trend @ 1993 = 0.010
Trend range = 0.065

Observations = 191
Series begins @ AUG 20 1975
Series ends @ AUG 12 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = -0.449
p(RHO) = 0.054 dof = 17

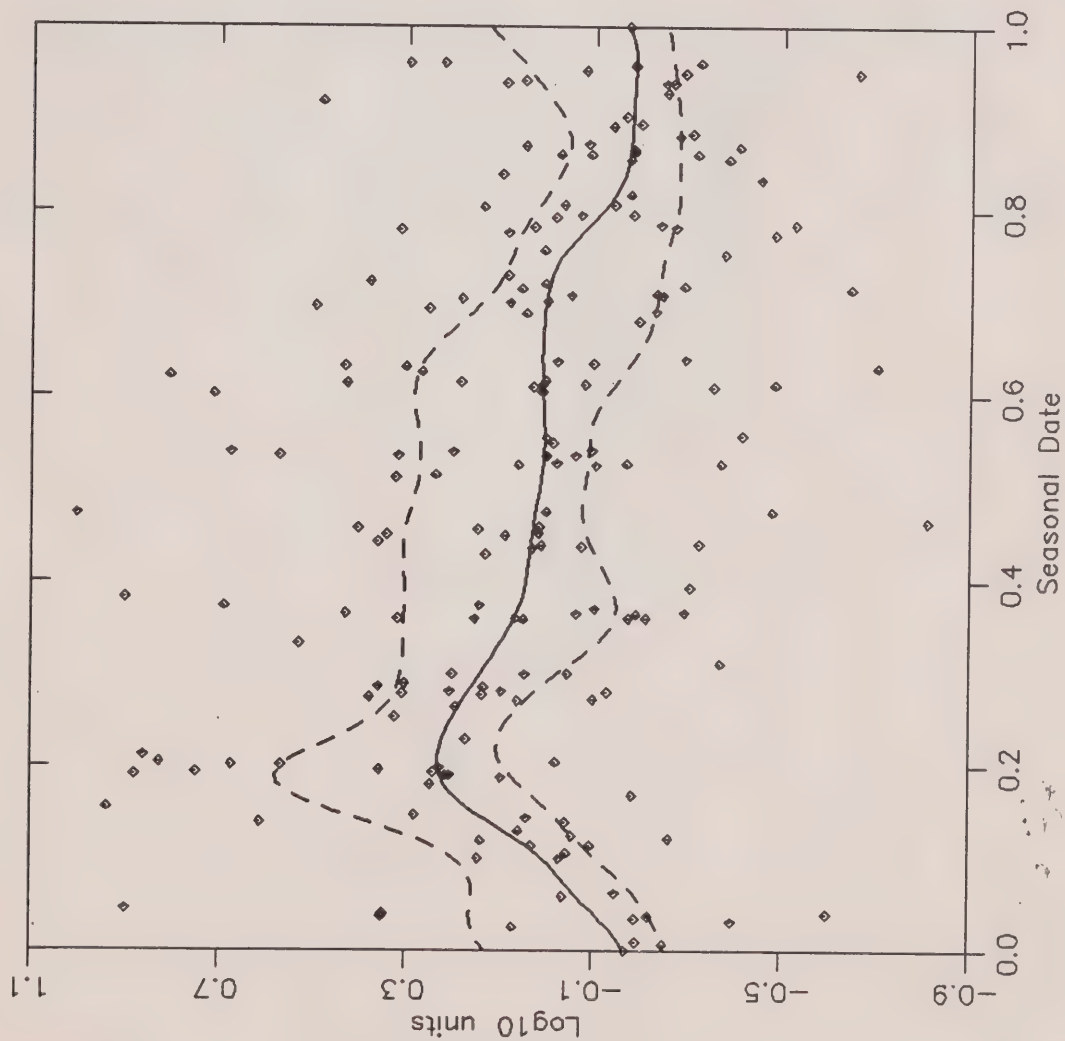
% Variation due to trend = 22.0

Data file: PPUT013.FTM
Parameter: PPUT
Site: 06007601302

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. at 22nd Sideroad, Glen Williams



Run #2: 1 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
-- 1st & 3rd quartiles

Seasonal Max @ MAR 15
Seasonal Min @ DEC 17
Seasonal Amplitude = 0.415

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 191

Series begins @ AUG 20 1975
Series ends @ AUG 12 1993

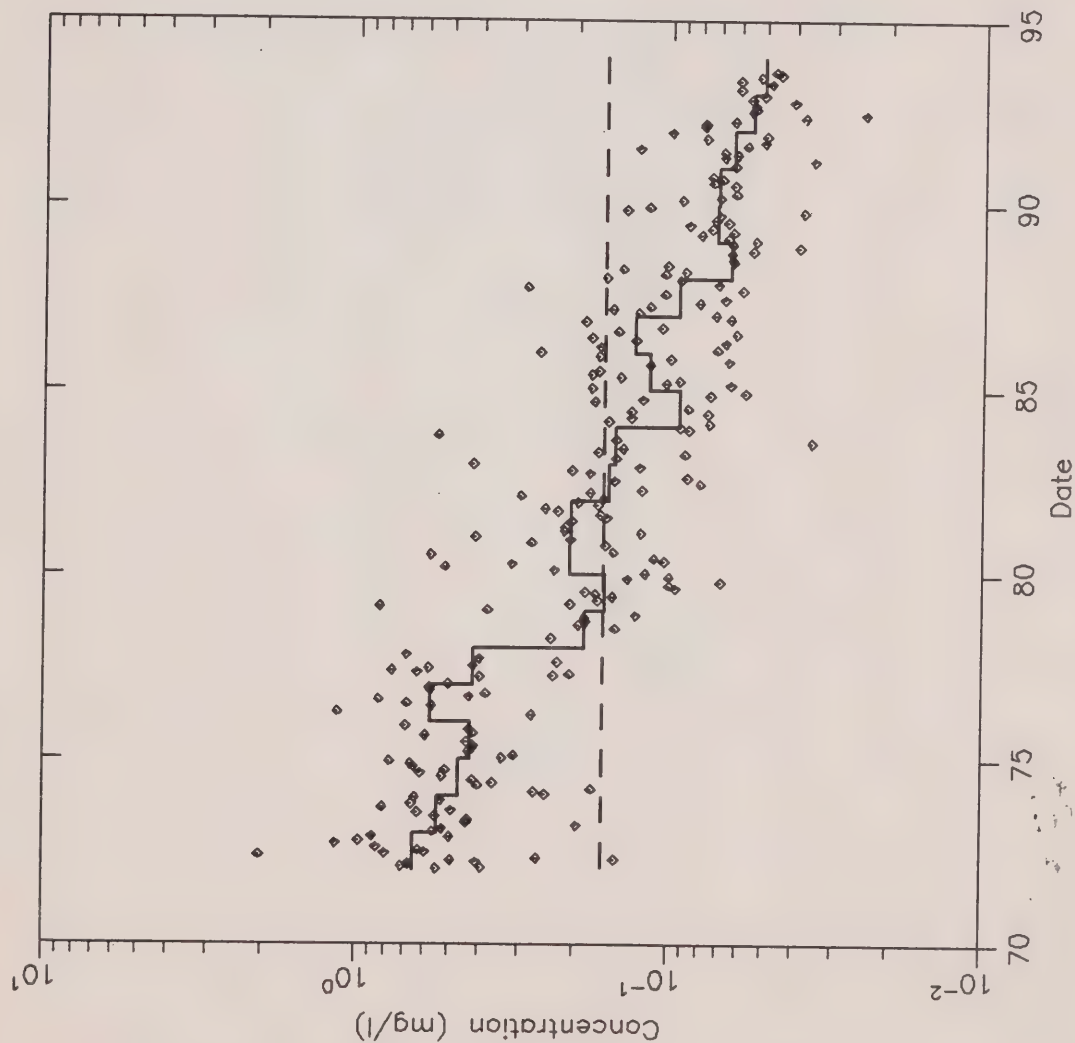
% Variation due to seasonal = 17.3

Data file: PPUT013.FTM
Parameter: PPUT
Site: 06007601302

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Phosphorus (mg/l)

Black Ck. at 1st. Conc. u/s from Limehouse



Run #2: 6 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
-- Geometric mean annual median
= 0.161

Maximum trend @ 1972 = 0.647
Minimum trend @ 1993 = 0.050
Trend range = 0.597

Observations = 233
Series begins @ JAN 12 1972
Series ends @ AUG 12 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

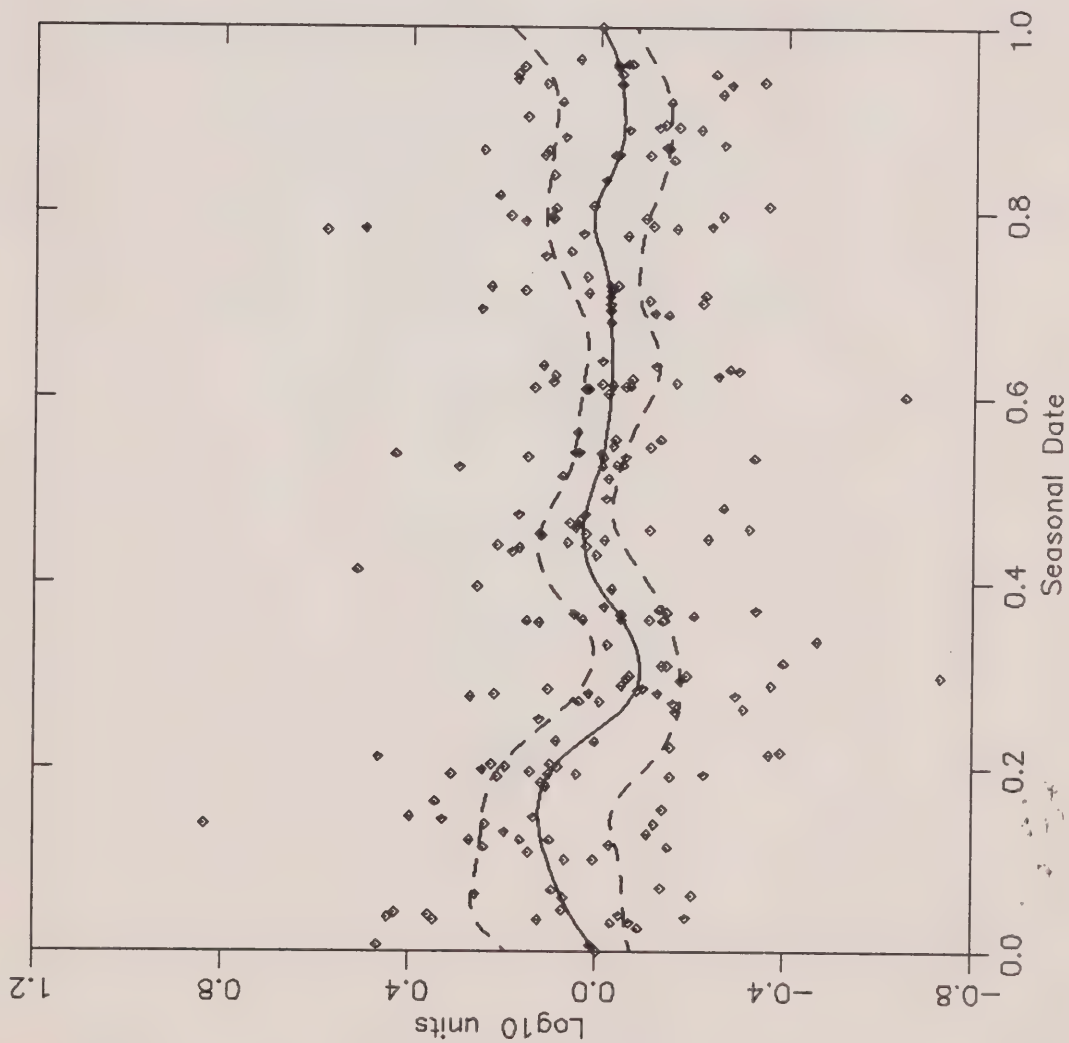
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = -0.973
p(RHO) = 0.000 dof = 20
% Variation due to trend = 77.3

Data file: PPUT008.FTM
Parameter: PPUT
Site: 06007600802

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Phosphorus (mg/l)

Black Ck. at 1st. Conc. u/s from Limehouse



Run #2: 6 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ FEB 24
Seasonal Min @ APR 24
Seasonal Amplitude = 0.215

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 233

Series begins @ JAN 12 1972
Series ends @ AUG 12 1993

% Variation due to seasonal = 13.2

Data file: PPUT008.FTM

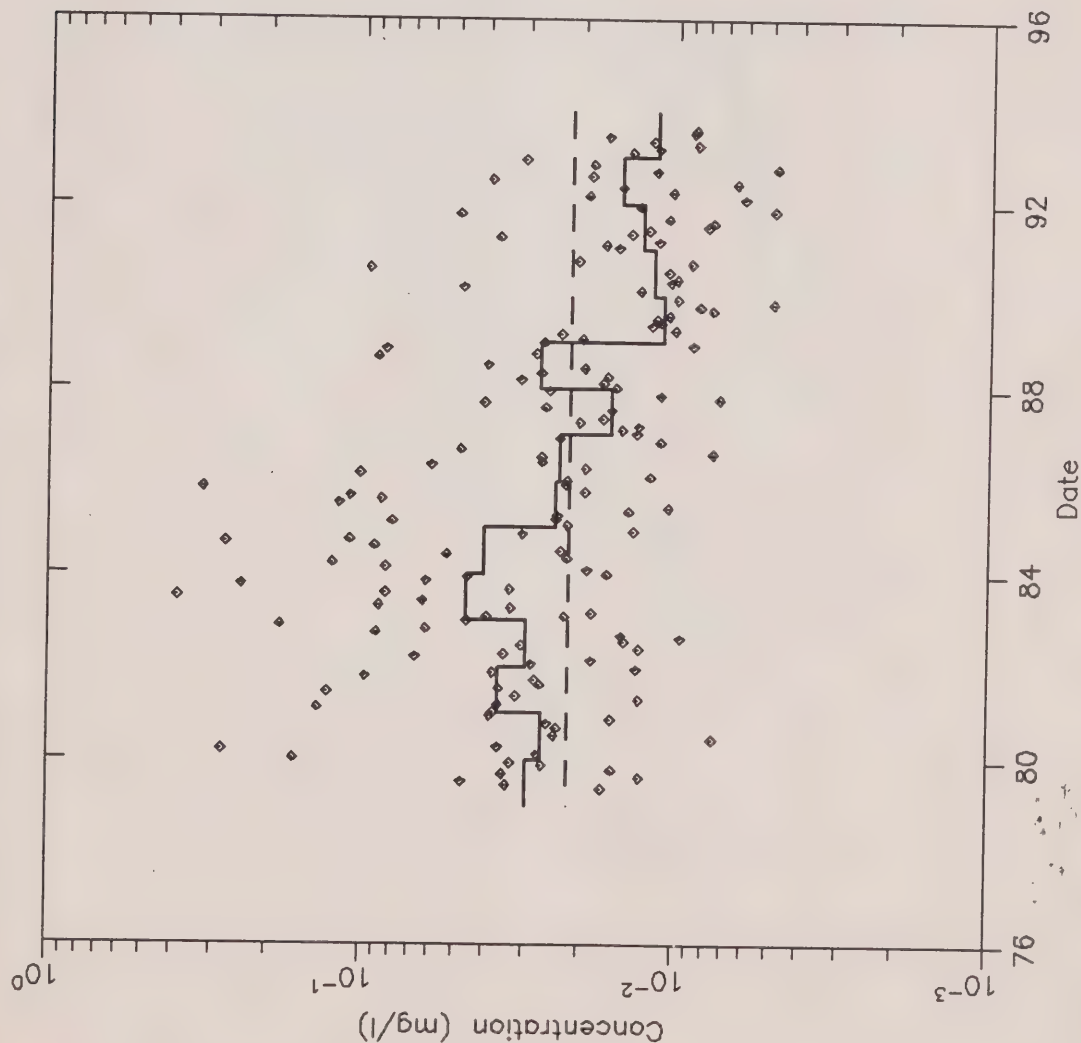
Parameter: PPUT

Site: 06007600802

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. West Br. at Cty. Rd. 13, Georgetown



Run # 1:

Run date: December 13, 1993

pgm = TRX

— Annual median

— — Geometric mean annual median
= 0.022

Maximum trend @ 1983 = 0.046

Minimum trend @ 1989 = 0.011

Trend range = 0.035

Observations = 162

Series begins @ MAY 24 1979

Series ends @ AUG 12 1993

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:

Spearman RHO = -0.786

p(RHO) = 0.001 dof = 13

% Variation due to trend = 29.4

Data file: PPUT022.FTM

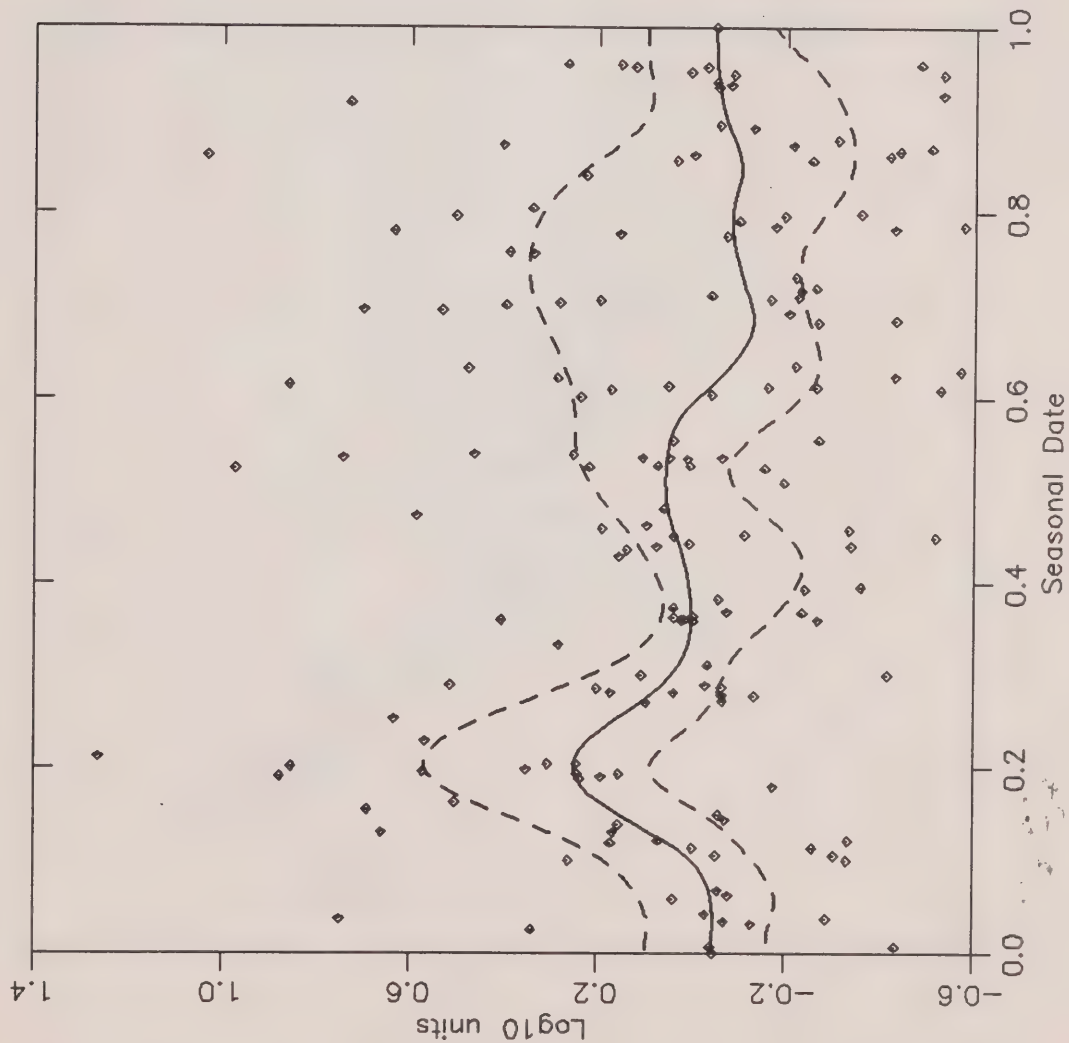
Parameter: PPUT

Site: 06007602202

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. West Br. at Cty. Rd. 13, Georgetown



Run #1:

Run date: December 13, 1993

pgm = TRX

— Seasonal median

- - - 1st & 3rd quartiles

Seasonal Max @ MAR 15

Seasonal Min @ SEP 6

Seasonal Amplitude = 0.380

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

Observations = 162

Series begins @ MAY 24 1979

Series ends @ AUG 12 1993

% Variation due to seasonal = 11.2

Data file: PPUT022.FTM

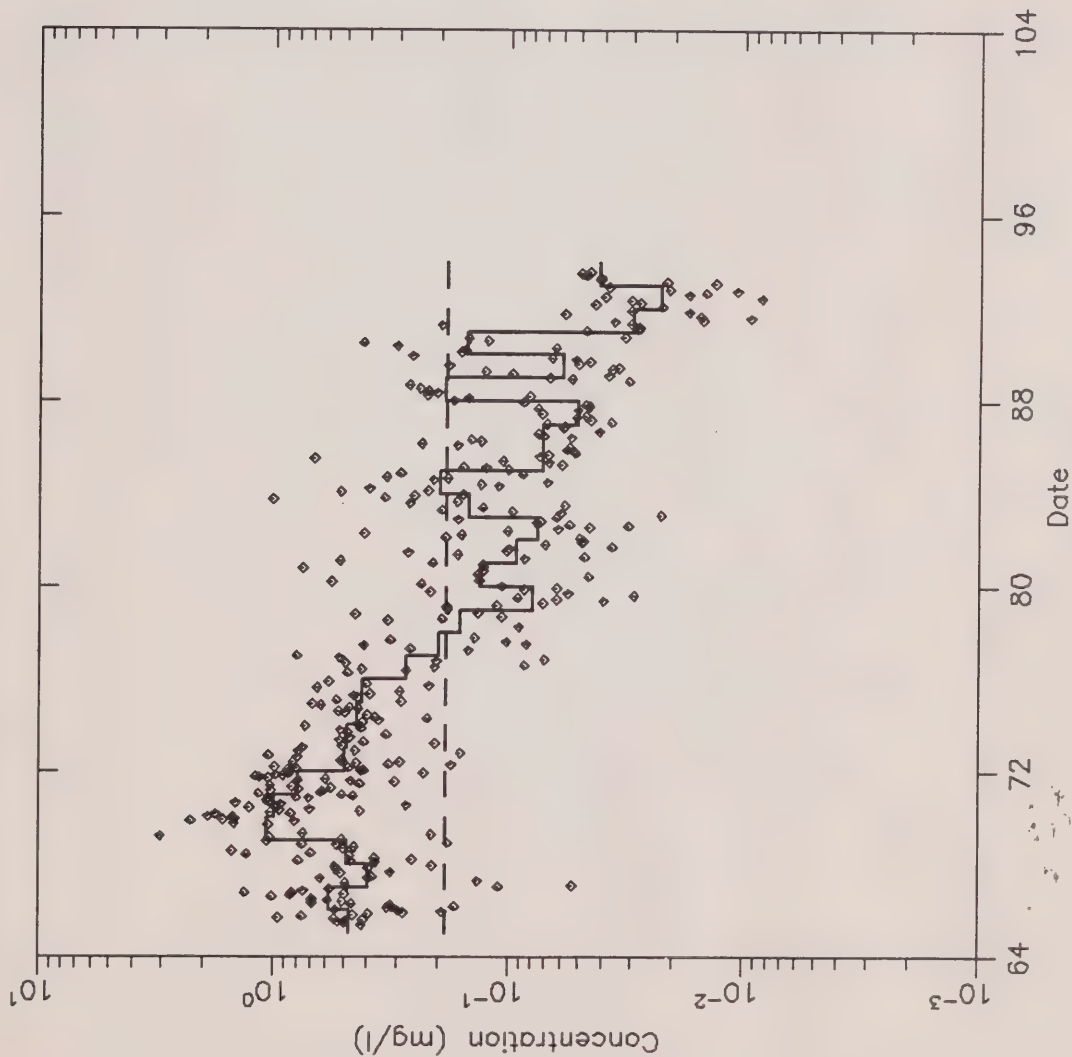
Parameter: PPUT

Site: 06007602202

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. West Br. at Hwy. 7, Norval



Run #2: 1 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median

. - . - Geometric mean annual median
= 0.184

Maximum trend @ 1969 = 1.064

Minimum trend @ 1992 = 0.023

Trend range = 1.041

Observations = 351

Series begins @ MAY 17 1965

Series ends @ AUG 12 1993

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIAN:

Spearman RHO = -0.881

p(RHO) = 0.000 dof = 27

% Variation due to trend = 74.6

Data file: PPUT004.FTM

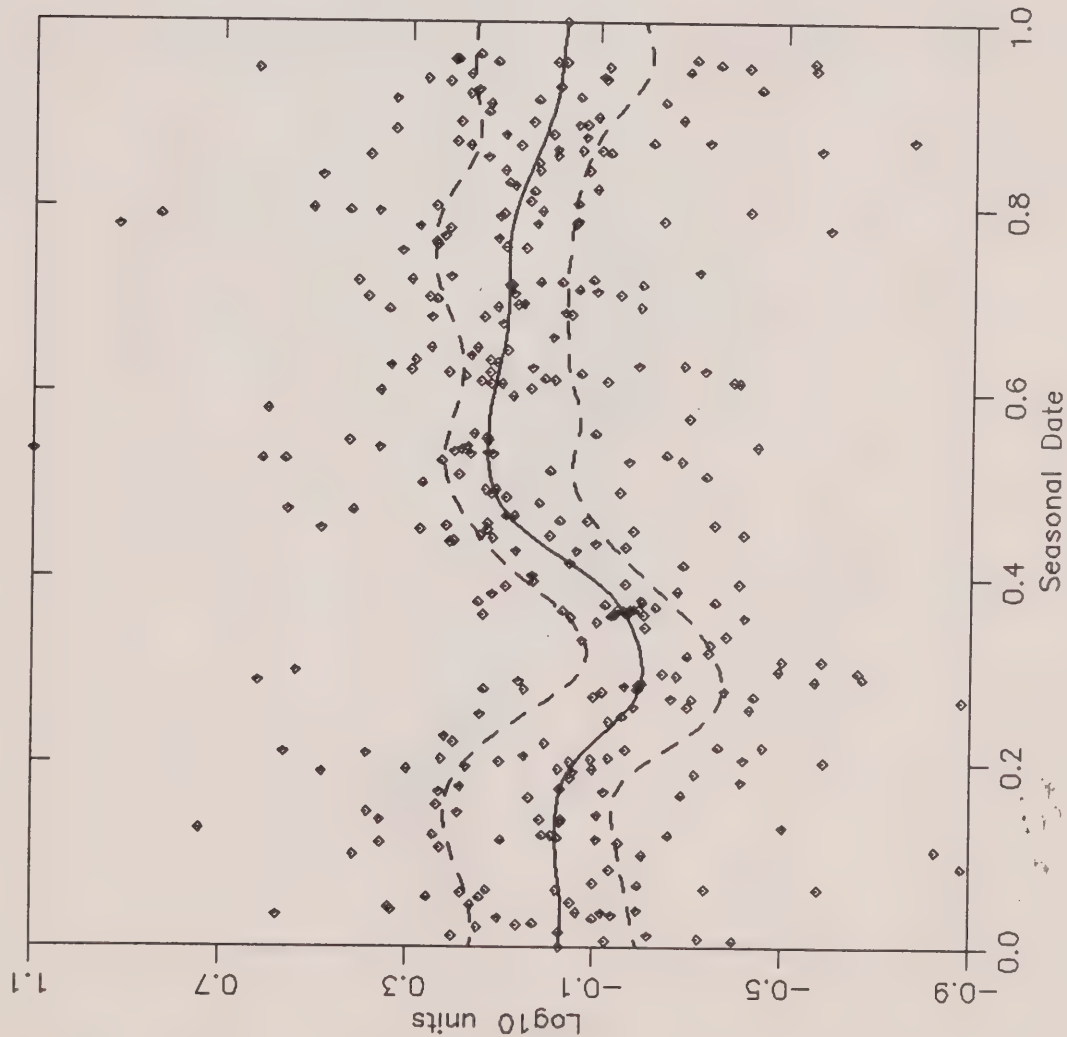
Parameter: PPUT

Site: 06007600402

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. West Br. at Hwy. 7, Norval



Run #2: 1 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ JUL 17
Seasonal Min @ APR 20
Seasonal Amplitude = 0.335

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 351

Series begins @ MAY 17 1965

Series ends @ AUG 12 1993

% Variation due to seasonal = 13.1

Data file: PPUT004.FTM

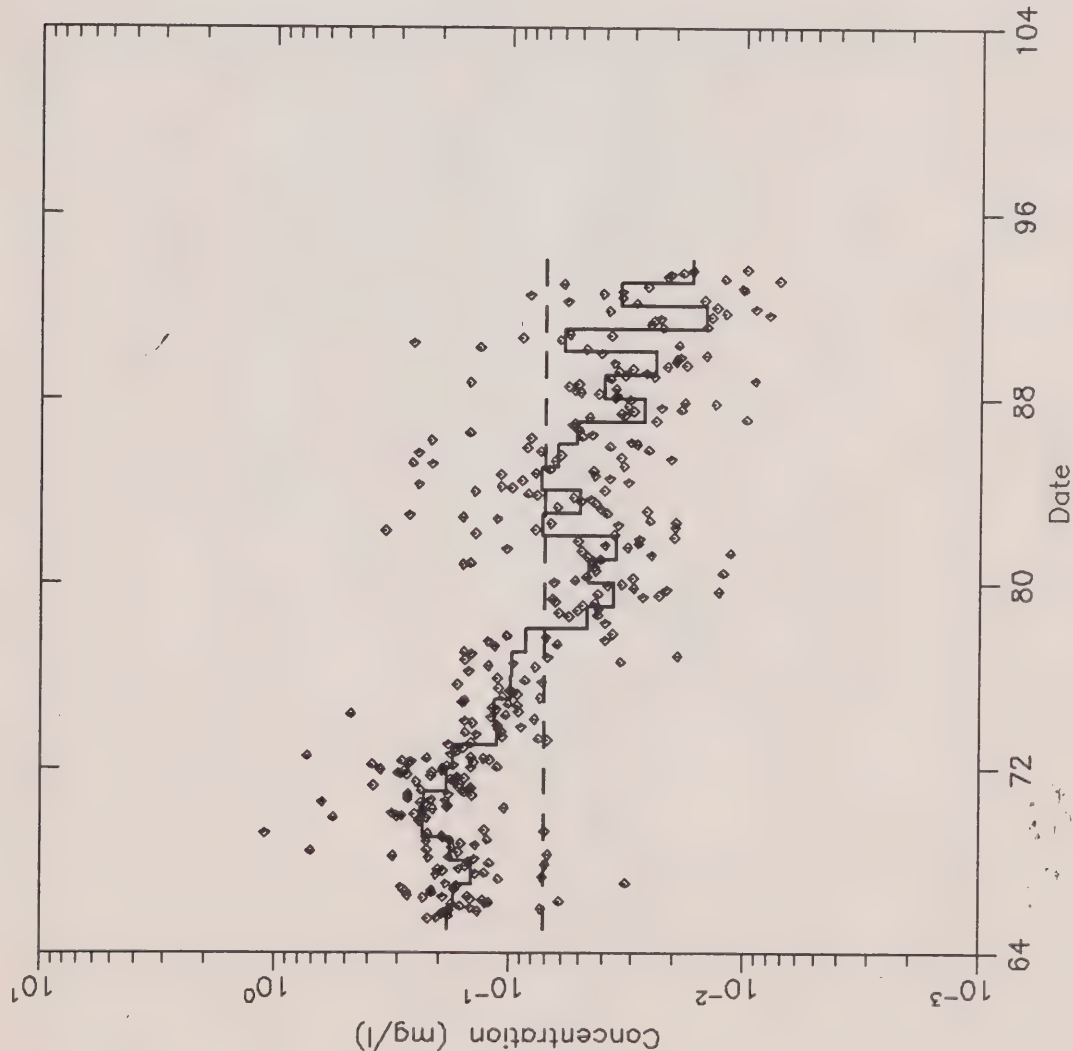
Parameter: PPUT

Site: 06007600402

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. at Hwy. 7, Norval



Run #2: 4 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median

- - - Geometric mean annual median
= 0.071

Maximum trend @ 1969 = 0.234
Minimum trend @ 1991 = 0.015
Trend range = 0.219

Observations = 349

Series begins @ JUN 30 1965

Series ends @ AUG 12 1993

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:

Spearman RHO = -0.880

p(RHO) = 0.000 dof = 27

% Variation due to trend = 70.1

Data file: PPUT003.FTM

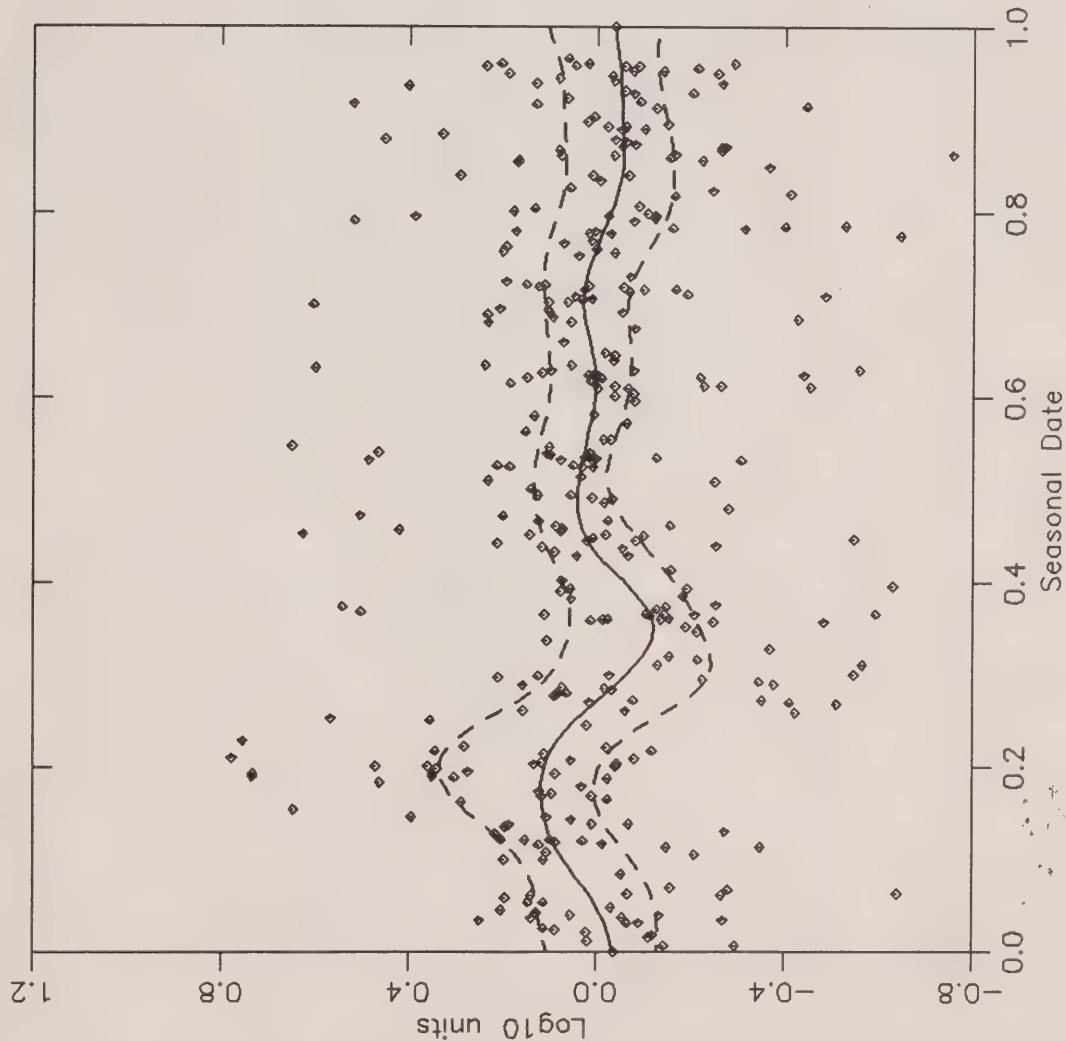
Parameter: PPUT

Site: 06007600302

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. at Hwy. 7, Norval



Run #2: 4 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ MAR 7
Seasonal Min @ MAY 8
Seasonal Amplitude = 0.238

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 349
Series begins @ JUN 30 1965
Series ends @ AUG 12 1993

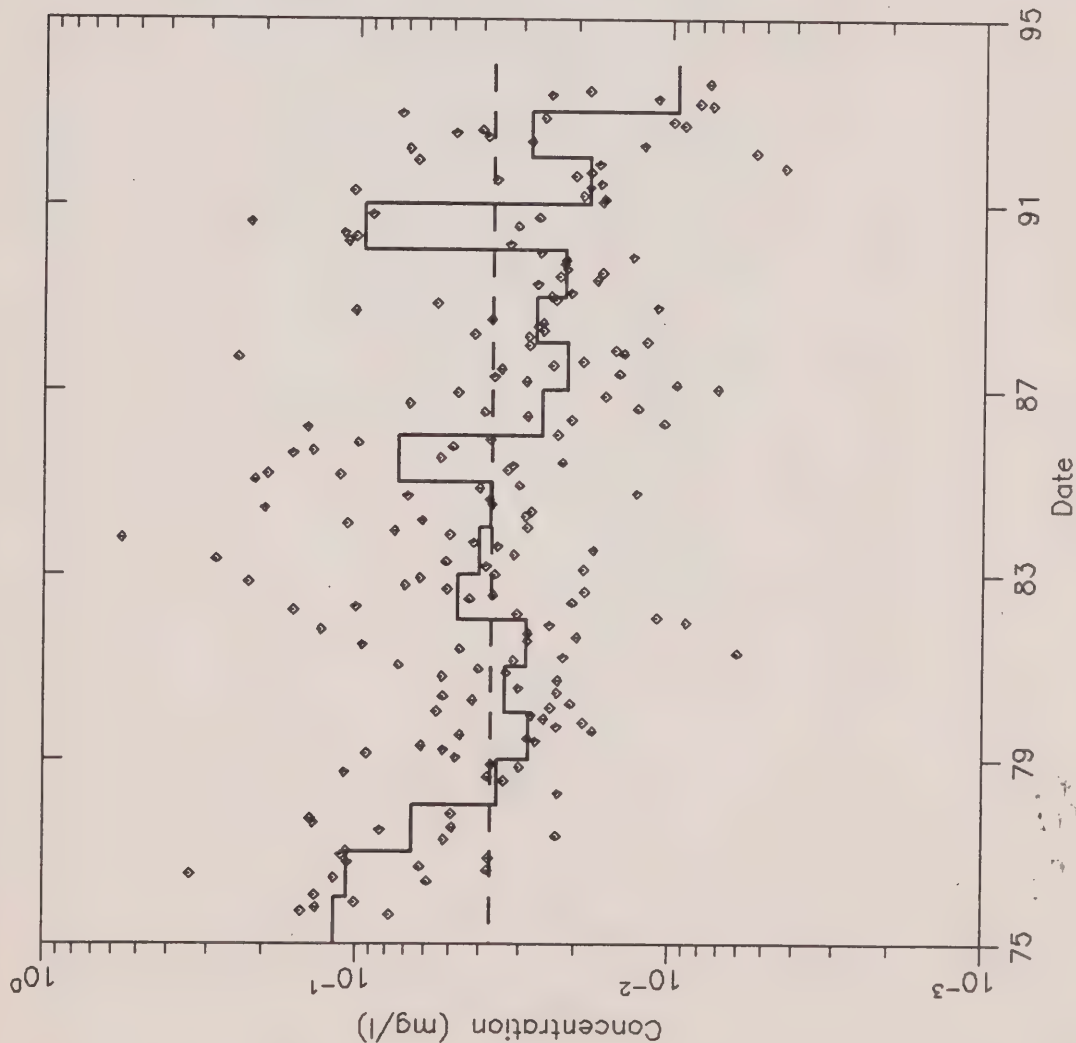
% Variation due to seasonal = 11.0

Data file: PPUT003.FTM
Parameter: PPUT
Site: 06007600302

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. at Derry Rd., West of Hwy. 10



Run #1:

Run date: December 13, 1993

pgm = TRX

— Annual median

-- Geometric mean annual median
= 0.037

Maximum trend @ 1975 = 0.117

Minimum trend @ 1993 = 0.010

Trend range = 0.107

Observations = 191

Series begins @ AUG 20 1975

Series ends @ AUG 12 1993

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:

Spearman RHO = -0.633

p(RHO) = 0.004 dof = 17

% Variation due to trend = 31.2

Data file: PPUT017.FTM

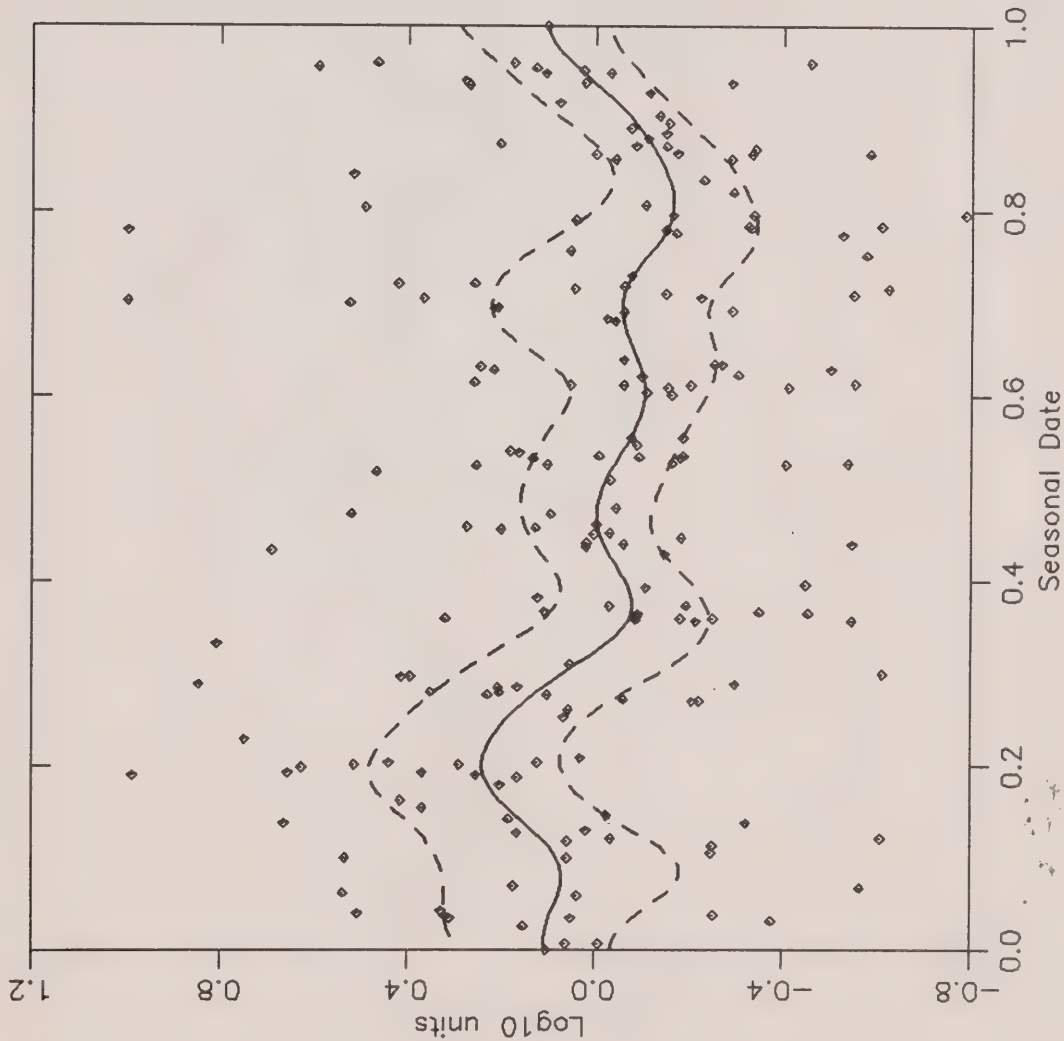
Parameter: PPUT

Site: 06007601702

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. at Derry Rd., West of Hwy. 10



Run #1:

Run date: December 13, 1993

pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ MAR 15

Seasonal Min @ OCT 23

Seasonal Amplitude = 0.406

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

Observations = 191

Series begins @ AUG 20 1975

Series ends @ AUG 12 1993

% Variation due to seasonal = 15.1

Data file: PPUT017.FTM

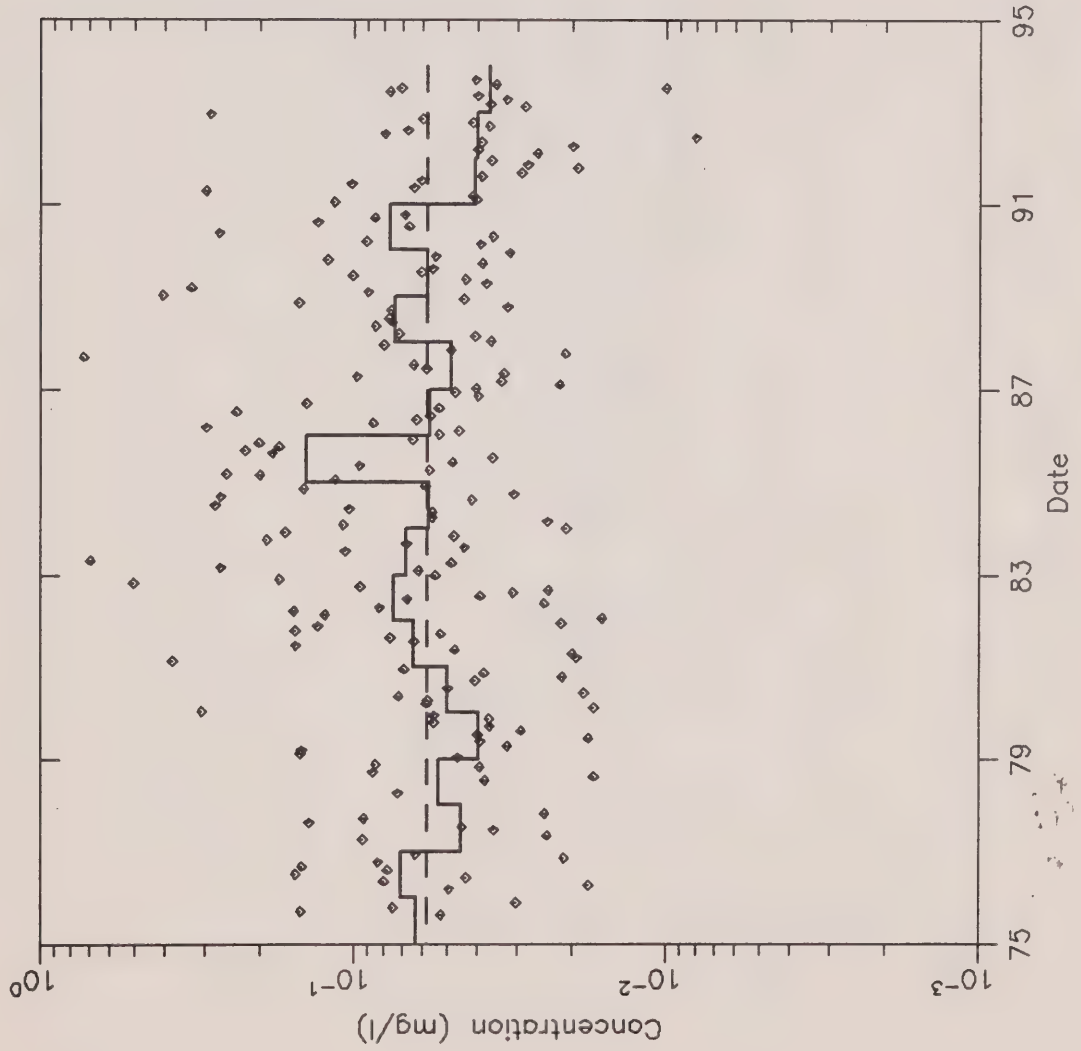
Parameter: PPUT

Site: 06007601702

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Phosphorus (mg/l)

Fletcher's Ck. at Steeles Ave., Brampton



Run #1:

Run date: December 13, 1993

pgm = TRX

— Annual median

- - Geometric mean annual median
= 0.058

Maximum trend @ 1985 = 0.142

Minimum trend @ 1993 = 0.037

Trend range = 0.105

Observations = 192

Series begins @ AUG 20 1975

Series ends @ SEP 16 1993

Iterations = 3

Minimum Window = 1/8 YEAR

Minimum N Per Window = 11

TREND TEST ON ANNUAL MEDIANS:

Spearman RHO = -0.163

p(RHO) = 0.505 dof = 17

% Variation due to trend = 8.2

Data file: PPUT016.FTM

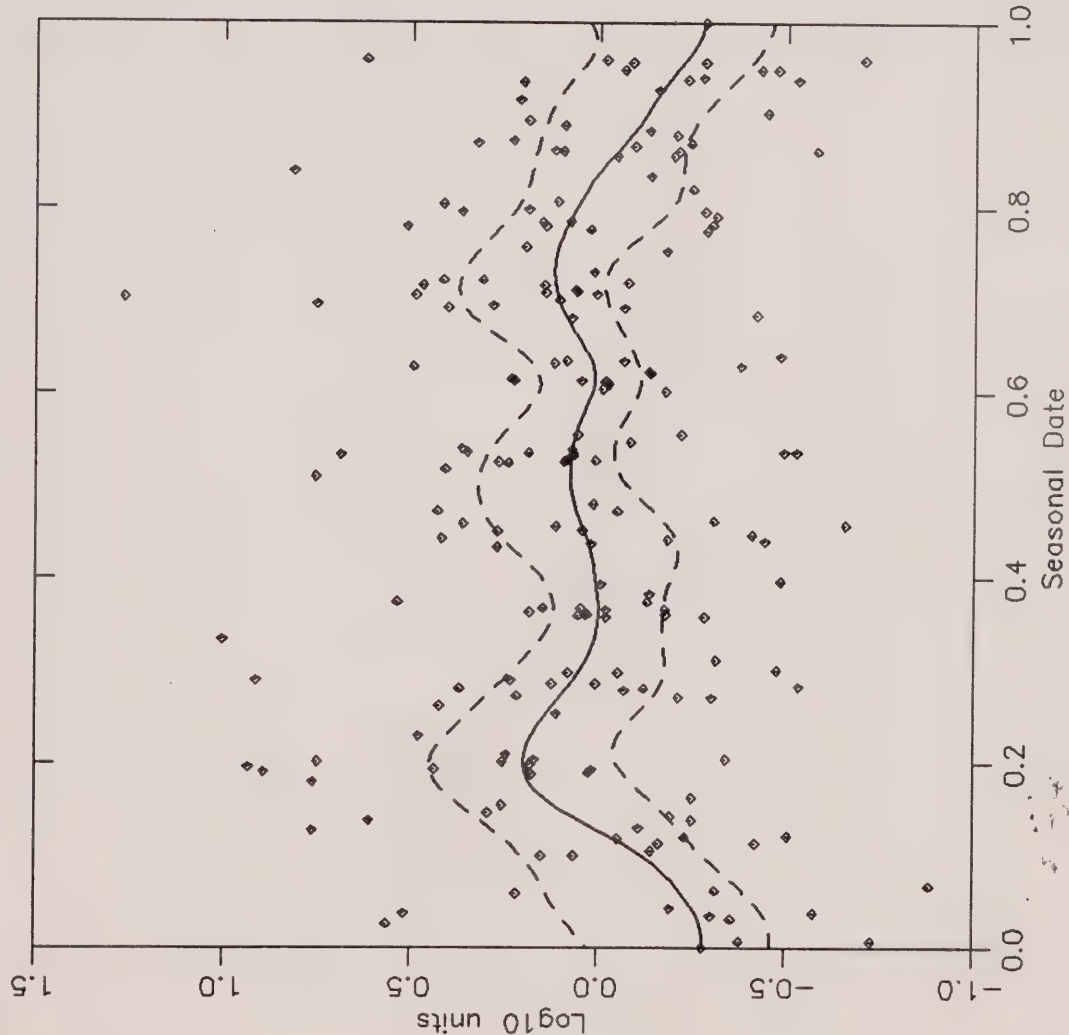
Parameter: PPUT

Site: 06007601602

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Phosphorus (mg/l)

Fletcher's Ck. at Steeles Ave., Brampton



Run #1:

Run date: December 13, 1993

pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ MAR 15
Seasonal Min @ JAN 4
Seasonal Amplitude = 0.480

Iterations = 3

Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 192
Series begins @ AUG 20 1975
Series ends @ SEP 16 1993

% Variation due to seasonal = 13.3

Data file: PPUT016.FTM

Parameter: PPUT

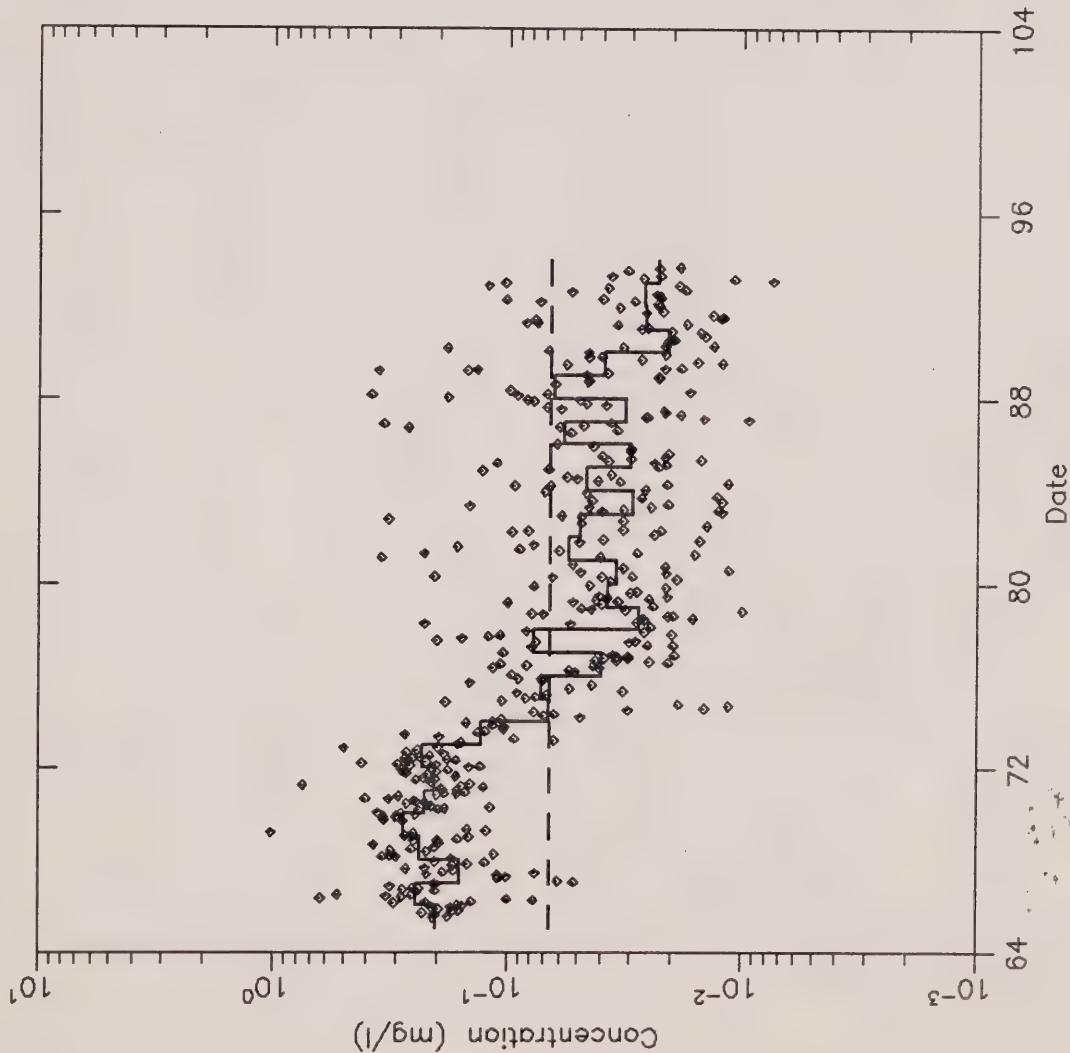
Site: 06007601602

5.

1. *...*
 2. *...*
 3. *...*
 4. *...*
 5. *...*
 6. *...*
 7. *...*
 8. *...*
 9. *...*
 10. *...*

TRENDS IN DE-SEASONALIZED LOG10 SERIES

Total Phosphorus (mg/l)
Credit R. at Hwy. 5, Erindale



Run #2: 12 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Annual median
- - - Geometric mean annual median
= 0.066

Maximum trend @ 1969 = 0.277
Minimum trend @ 1990 = 0.021
Trend range = 0.257

Observations = 398
Series begins @ JUN 30 1965
Series ends @ SEP 14 1993

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

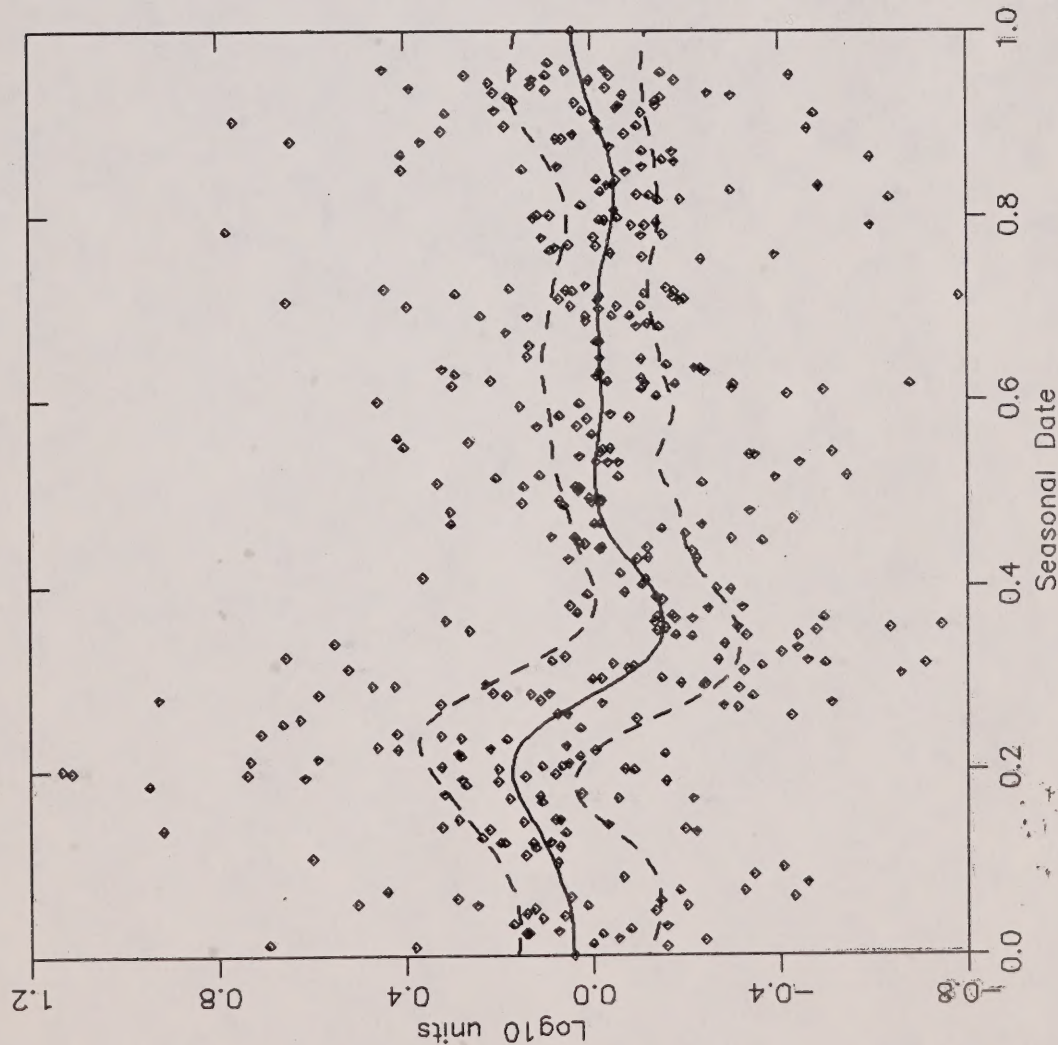
TREND TEST ON ANNUAL MEDIANS:
Spearman RHO = -0.853
p(RHO) = 0.000 dof = 27
% Variation due to trend = 63.3

Data file: PPUT002.FTM
Parameter: PPUT
Site: 06007600202

RELATIVE SEASONALITY IN DE-TRENDED LOG10 SERIES

Total Phosphorus (mg/l)

Credit R. at Hwy. 5, Erindale



Run #2: 12 FAR OUTLIERS DELETED
Run date: December 13, 1993
pgm = TRX

— Seasonal median
- - - 1st & 3rd quartiles

Seasonal Max @ MAR 15
Seasonal Min @ MAY 12
Seasonal Amplitude = 0.324

Iterations = 3
Minimum Window = 1/8 YEAR
Minimum N Per Window = 11

Observations = 398
Series begins @ JUN 30 1965
Series ends @ SEP 14 1993

% Variation due to seasonal = 13.8

Data file: PPUT002.FTM
Parameter: PPUT
Site: 06007600202

